

Sign Language Interpretation Services for Children with Hearing Impairment in Inclusive Secondary High Schools

*A Case Study on the Challenges Faced by Sign Language Interpreters in One
Secondary High School - Uganda*

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Abstract

This study was carried out in Uganda between the period August and December, 2006. The phenomena focussing on the Challenges Faced by Sign Language Interpreters working in an Inclusive High School setting was studied. The study principally explored the challenges that emanated from Sign Language Interpreters themselves and from the School working environment. The influences and coping strategies to counter these challenges were identified. A qualitative case study approach was used to study four Sign Language Interpreters, working in the same setting identified. Through formal and informal interviews, participant observation strategies, their verbal and non-verbal communication approaches during indoor and outdoor interpreting assignments and motivational strategies in the empery were discussed. In addition, supplementary data on attitudes, relationships and interpreter competence was also obtained from the teachers, Deaf and Hearing Children. The study towed the path based on the theory of Language and Communication advanced by scholars Bloom and Lahey (1997). Study findings indicated that a mere Communication disparity in such an Inclusive working environment was not conclusive enough to explain the phenomena. An in-depth study with all informants about their socio-cultural benchmarks, helped to expound the phenomena in question. Verbal and non-verbal communication strategies played a pivotal role in the interpreted information, which some times caused misunderstandings in the interpreters' professional work and social life with those they associated with in the School. Interpreters objectively expressed their experiences & challenges they faced with their clientele, possibly because they worked in an environment with people of completely different educational and cultural diversity/identity. Attitudes, unpleasant motivational strategies, educational backgrounds and communication strategies were key aspects identified in this regard. Recommendations to develop a good working environment, interpreter development, Teacher training in the area of Special Needs Education, School adaptation to the work of Sign Language Interpreters and areas of future research are also suggested in the end in order to help achieve the Principle of Inclusive Education (PIE).

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List of Abbreviations/Acronyms used in the Thesis

(Not in Alphabetical order)

CWHI	Children with Hearing Impairment
SLI	Sign Language Interpreters
ADD	Action on Disability and Development
UNAD	Uganda Ntional Association of the Deaf
PwDs	Persons with Disabilities
UNEB	Uganda National Examinations Board
USSE	Universal Secondary School Education
UPE	Universal Primary Education
IDPCs	Internally Displaced Peoples' Camps
USL	Ugandan Sign Language
RID	Registry of International Interpreters Asociation
EARS	Educational Assessment and Resource Services
WFD	World Federation of the Deaf
UNESCO	United Nations Educational, Scientific Cultural Organisation
EFA	Education For All
NUDIPU	National Union of Disabled Persons of Uganda
AIDS	Acquired Immune Deficiency Syndrom

Dedication

To all the Deaf Community in Uganda and my family for their loving care and nurturing my career to what I am today. With out you, my dreams would not have come true!

Preface

It is now thirteen years since the UNESCO (1994), Salamanca Statement and Framework for Action of Special Needs Education world conference declaration was made in Spain. Many countries world over have struggled and are still struggling to implement the agreed principles on this declaration. But to what extent is the provision of equal and fair education to children with disabilities, including children with hearing impairment (CWHI) being achieved? What is exactly happening at the grass root levels as far as post-primary educational of these children in economically unprivileged countries from the South is concerned? How should we consider inclusive education a lasting solution to quality education in environment of competing voices towards this course? What are some of the challenges and lessons learnt in an attempt to provide quality education to these children in countries struggling to do so? How are the underlying challenges faced by those striving to achieve the goal of inclusion and education for all (EFA) being addressed? All these questions and many more is what this research attempts to answer with a selected case study on the work of sign language interpreters working with children with hearing impairment in one secondary school in Uganda. As suggested in the main body of the thesis, many lessons have been learnt and attempts to promote inclusive education and the associated challenges faced by those involved in this endeavour is worth sharing with all educationists in the area of deaf education in post-primary inclusive learning environments.

The thesis is divided into five main Chapters and Sections which explain the phenomena studied. The first Chapter discusses some important global and legal developments in Uganda related to the country's educational system. Key aspects like; The government White Paper on Education (WPE), Disability legislations including sign language and its use, sign language interpreting, universal primary and secondary school education implementation strategies and their influence on the work of sign language interpreters are highlighted. The introduction gives a brief

description of the main concepts, background information about the study problem, objectives of the study and concludes with a quick over view of its significance. In Chapter two traces current theoretical views related to communication and sign language interpreting in respect to inclusion after the Salamanca Statement was put in place; it discusses views from writers in the field of deafness and how their ideas are related to the phenomena studied. Chapter three discusses the research methodology and instruments applied. It explains the procedures used to identify the empery, study informants and some of the challenging aspects. It goes ahead to explain how the pilot studies was helpful to operationalise the instruments used. The chapter concludes by highlighting validity and reliability issues and their relevance to the study itself. Some of the challenges and dilemmas are put across that leads to the reader to the summary of the study process in the end.

Chapter four briefly introduces data presentation and analysis. It gives background information related to the informants involved in the study and the thematic development strategy of categories and sub-categories that were followed in the presentation and analysis. The factors identified were presented and analysed following the interviews from main and key informants. Discussions were related to the main study and sub-questions developed. The main aspects from all the informants involved were clustered and discussed all together since they form the core of the research problem. Additional information from secondary informants (teacher, hearing & deaf children) was treated concurrently with the main data sources that helped to clarify similarities and differences based on their opinions. The final Chapter five is based on discussions, conclusions and recommendations. It presents a description of key aspects identified in the study. These commentaries are tagged with the theoretical perspectives discussed in the previous chapters. Emphasises is on communication, attitude change, interpreter professional development, and teacher training as prerequisites for the provision of support services in the setting studied. It concludes by pointing out what has been learnt and what remains to be learnt, recommendations and possible areas of future research. The researcher's personal reflective notes form an end point to the thesis. The readers' opinions are welcome.

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1. Introduction and Background to the Study

Chapter one explains a general overview of Uganda where the study was conducted. It describes a qualitative case study approach to the problem studied; the Challenges faced by Sign Language Interpreters working with Children with Hearing Impairment (CWHI) in one Inclusive Secondary High School setting. The chapter presents the study problem, study background, objectives, scope of the study and other relevant aspects that form the background to the main study are also presented. The findings are based on theory of Language and Communication advanced by scholars Bloom and Lahey (1978). This particular theory was applicable because it focused on a society other than an individual; hence was a better option for this study. Being part of the MPhil - SNE student between Uganda and Norway, I was particularly interested in the area of Sign Language Interpreting as an area that interested me from my experience working with children with hearing impairment. According to my situation in Uganda, there was an increasing need to have Sign Language Interpretation services in secondary schools for Children with Hearing Impairment. This necessitated doing a study in this area to find out what could be the challenging factors to their work. I do not intend to generalise the findings. It is my hope that the research findings can be replicated in other secondary schools spread in the country. I have chosen to use the past tense in the description of the main body of the thesis.

1.1 General Information

Uganda, officially the republic Uganda, is found in East Africa and bordered by the African countries: Kenya and Tanzania, Sudan in the North, and the Democratic Republic of Congo in the East. Lake Victoria is the largest water body. Land coverage is 236,040 km in size. Population size stands at 27,615,000 (Population Census, 2002). The country developed a White Paper on Education (1992) which embraced an enabling environment to provide education for Children with Hearing Impairment at secondary level. It is worth noting that about 50% of the country's

total budget is donor funded which covers the education sector as well. There is also an increased enrolment of Children with hearing impairment in secondary School (UPE Users Hand Book, 2004). By the time of writing this thesis, there was only one government-aided Secondary School built for the Deaf children in the country and one state university that trains special needs educators and sign language interpreters. Article 35(1) of the Constitution¹ of the Republic of Uganda, recognizes promotion of education for Children with Hearing Impairment (Uganda Constitution, 1995) this article states that;

“Persons with disabilities have a right to respect and human dignity and the state and society should take appropriate measures to ensure that they realize their full mental and physical potential”.

The constitution of the Republic of Uganda, principle XXIV(c) further states that; *“The state shall promote the development of sign Language for the Deaf.”* (p.8). this legal provision therefore permits Deaf people to have equal access to education in the best way possible, in this case, through the use of support staff like sign language interpreters.

1.2 Educational System

Uganda is in agreement with international conventions and declarations that promote the welfare and equal educational opportunities for all children, irrespective of their social status and disabilities. Primary and secondary school educational system is universal. Universal Primary Education programme realised an enrolment of over 7.6 million children, including children with disabilities (Primary Education Supplement, 2004). Examination system is centralized under the Uganda national examination board (UNEB). The policy of Inclusive primary school education is piloted in model primary Schools in the country, in partnership with Oslo University, NUFU project and the Norwegian government ministry of Education. However, Universal

¹ Uganda was among the first African country to include Sign Language in her National Constitution. Since then over 33 world countries have SL recognized in their legislations (Uganda National Association of the Deaf, 2006).

secondary system of education have not fully benefitted Children with Hearing Impairment as expected due to lack of adequate special needs education teachers and support staff at this level. By the time of doing this research, there was only one government aided secondary school and no programme designed to train grade five secondary school teachers in special education, except at primary school teacher training colleges and university.

Special Needs Education

In an attempt to promote the provision of special needs education in the country, the Uganda National Institute of Special Needs Education (UNISE) was established in 1991. This institute was mandated to train primary school special needs teachers (UNISE Bulletin, 1997). This institute had been upgraded to a fully fledged faculty of Special Needs Studies and Rehabilitation. The faculty has Departments and a section that trains professional Sign Language Interpreters at Diploma certificate level. However, among its outstanding objectives includes; undertaking research in the area of disability and Ugandan Sign Language, its use and development (Uganda Sign Language Research Project, 2006). By the time of doing research, the faculty had trained over 700 teachers under the university conventional and distance education programmes. About 25 sign language interpreters were also trained within a period of five years (Department records, 2006). Those who finished training got employed in organizations and some mainstream/inclusive Schools through out the regions in the country.

1.3 Focus of the Study

The introduction of the Sign Language training in Uganda was a land mark in the education of Children with Hearing Impairment. As mentioned earlier, there is only one government-aided University mandated to train professional primary school teachers in Special needs Education, including Sign Language Interpreters. However, this development has not properly addressed equal educational access to children

with disabilities, which is contrary to the United Nations (1993; 23) Standard Rule Six (6) on the Equalization of Opportunities for Persons with Disabilities which states that;

“States should recognize the principle of equal primary, Secondary and Tertiary Educational opportunities for children, youth and adults within integrated/inclusive settings”

The Salamanca Statement and Frame work for Action on Special Needs Education (UNESCO, 1994) also goes beyond “integration” and advocates for “inclusive education” as a means for “*education for all*” (EFA). In this case, inclusive education means having a flexible educational system that fulfils meaningful education for all children, including Children with Hearing Impairment. However, this may not be achieved easily if all the possible mechanisms are not practically put in place and if the government does not support the existing mechanisms to achieve this goal.

1.4 Rationale of the Study

My experience teaching and working with organizations/institutions of persons with disabilities (PWDs) like Action on Disability and Development (ADD)-Uganda Deaf Development Programme, Uganda National Association of the Deaf (UNAD), gave an opportunity to interact with sign language interpreters and Deaf people of different educational, experiences and socio-economic backgrounds in different settings; for example during staff meetings, workshops and in conferences. What triggered my enthusiasm most was communication difficulties experienced by these interpreters and their clientele. Although most Interpreters were fluent users of Ugandan Sign Language, I realised that most of them worked out of experience and their day to day interactions with the Deaf Children for example as neighbours of families with deaf Children, during sports or went to the same main stream schools with them. I also noted that Sign Language Interpreters, who had their first encounter with the Deaf people during childhood days were regarded by the Deaf people as ‘*best interpreters*’

although their performance was questioned by others in the community. I realised that Deaf people relied entirely on Sign Language Interpreters who subscribed to the Deaf culture, other than those who had gone through formal professional educational training from university and other institutions like the Uganda national association of the Deaf (UNAD). Regional variation in signs and voicing skills could be due to the different environments in which they lived. During my intermissions with interpreters in formal meetings and social gatherings, I realized that some Deaf participants were not getting along with their work. I wondered whether this was because of the new exposure with a completely different target groups or as a result of differences in the sign language used by the Deaf community where some projects or schools for the Deaf were located in the country. This background therefore gave a convinced platform to single out a case study on the challenges faced by Sign Language Interpreter in an inclusive secondary high school setting.

The other reason behind carrying out this study emerged from the fact that it was mandatory for all Children with Disabilities, including children with hearing impairment to gain access to meaningful Education in the best way possible (Uganda government white paper, 1992). To date, many people in Uganda who work as Sign Language Interpreters, either with Educational Institutions or Organizations working for Persons with Disabilities (PDWs), have not had formal training in this field as explained above. Other studies also revealed that even with the services of a highly skilled Sign Language Interpreter, it was believed that their full access to the content and the social life of a Child with Hearing goes with challenges (Schick, 1999). Interpreting in a hearing class room and in any other activities in such a setting could be challenging if interpreted by third parties (Schick, Williams, & Bolster, (1999). Against this background therefore, the phenomena that demanded much attention was to investigate the factors that deter successful interpretation services and ways of minimizing them in such a complex educational setting. Before embarking on this topic, I considered worth defining and clarifying some concepts used in the text.

1.5 Definitions and Clarification of Related Concepts

Ugandan Sign Language

Ugandan Sign Language (USL) is an indigenous visual/gestured language based on the use of manual and non-manual features used by the Deaf community in Uganda. Uganda Sign Language is perceived through sight and produced by the hands, face, body, and head other than through oral channels. The hands produce the manual signs while other parts of the body namely the head; body, face, eyes and mouth produce the non-manual features. The non-manual features are significant as they too carry linguistic information, which is vital for communication between the Deaf and hearing peers. Sign language is closely related to Deaf culture, values, customs and the history of the communities in which Deaf people live (UNAD, 2004).

Deafness

A Deaf person is one who has a hearing impairment which is so severe that it precludes successful processing of spoken language through audition, with or without a hearing aid (Hallahan and Kauffman, 1991). The audiologists look at Deafness as living under absolute silence. Ling, in Eron, (1996), argues that not all persons considered Deaf are really Deaf. The largest groups of Deaf people are those who have mild hearing impairment. This group is therefore referred to as hard of hearing (HH). Hard of hearing denotes the presence of some residual hearing that enables the process of linguistic information with or without amplification.

Hearing Impairment

This is a generic term indicating a hearing loss which may range in severity from mild to profound (Nambira, 1994). However, hearing impairment is seen differently by different people. In Uganda, the term Hearing Impairment is categorised as; Deafness and Hard-of-Hearing (Eron, 1996). People with hearing impairment in Uganda live among communities and they exist naturally through out the regions in

the country. Although their appearances are quite synonymous, the only difference one can notice in them is the mode of communication they use. People with hearing impairment, can also do any thing that other hearing people can do, like getting an education, being employed and becoming spouses, except to hear. This community is a distinct minority group among the marginalized minority groups in the context of and in response to the dominant hearing culture across the country. Studies show that people with hearing impairment in Uganda considers itself a linguistic minority based on the socio-cultural view (UNAD, 2004). This community includes other persons who are not themselves Deaf but actively support the goals and work with the Deaf people to achieve these goals. Hearing people such as parents, relatives, teachers of the Deaf children, Sign Language Interpreters, professionals, and their friends are regarded accepted members of the Deaf community; if they show positive attitudes and respect to Deaf people (NUDIPU, 2004).

Sign Language Interpreting

Sign Language Interpreting is a service provided by hearing people to a community of Deaf and hearing people, who do not understand a common language (World Federation of the Deaf, 1993). Sign language interpreters in this context are typically hearing people who translate the voice of a speaker(s), into signed/voiced language of Deaf people into any other linguistic vocabulary for the hearing people. To demonstrate proficiency, interpreters are expected to be bi-lingual and should know a particular languages and skills required to work in different interpreting settings (World Federation of the Deaf, 1993).

However, I note here that people with hearing impairment, can also serve as relay interpreters who assist professional sign language interpreters to simplify signs to a Deaf audience with low linguistic coherence. It is important to mention that this study was not entirely meant to examine the challenges faced by sign language interpreters who have had formal training in this field; the studies incorporates views from interpreters working in the same School but were of different educational backgrounds and experiences. Study findings are based on the theory of

communication and social interaction, which helped to describe the intrinsic and extrinsic challenges faced by sign language interpreters in the empery. During the planning stage, I considered the theoretical views advanced by scholars Schick, MarScharck, Vonen, Williams and Bolster (1999). They all emphasized the concept of interpreting in relation to the schools environments where they worked and did research.

1.6 Background to the Education of Children with Hearing Impairment

Education of Children with Hearing Impairment dates back from the time of Del'app'e a re-known Bell Graham and Gallaudet Hopkins. These great men and many others are remembered for steering the society into debates in the field of education for these Children (Erikson, P.1998). However, in Uganda, the education of Children with hearing impairment was pioneered especially by the missionary white fathers. After the 1990, this development extended to private and government-aided Secondary Schools (Eron, 1996). The pioneer teachers, who were recommended to go for further studies abroad, were selected basing on their interest working with these Children, although they were not very fluent in sign language. This progress was however, hampered because of the political and economic turmoil which the country went through. The visit of the director of the then UNESCO sub-regional project for East, Central and Southern Africa (1984), followed by a mission visit by the UNESCO team (1987), lead to establishment of a training centre for teachers with special needs education and later Sign Language teaching, at the Institute of Teacher Education Kyambogo (Okwaput, 1996). This institute has now been elevated into a faculty with a section where Sign Language Interpreters are also being trained.

1.7 Sign Language Interpretation Services

Sign language interpreting is a service provided to Children with hearing impairment and hearing people who do not understand a common language. As mentioned earlier, Sign language interpreters are typically hearing people, who translate voiced/signed information from hearing persons, into any linguistic vocabulary, to facilitate communication between the Deaf and hearing people who do not understand a common language. The study considered a secondary high school as a case and Sign Language Interpreters as main informants from where the study sample was chosen. Additional information was obtained from secondary case informants; classroom Teachers, Hearing Children and Children with Hearing Impairment. Their views on the phenomena were explored objectively through interviews and observations. All informants were requested to give their perceptions about how they felt, treated and coping strategies during indoor and outdoor work in the School. Key among the fundamental aspects was also to find out better working conditions among interpreters and their clientele. This was therefore treated a significant purpose for undertaking a detailed study with a reasonably limited number of informants.

1.8 Statement of the Research Problem

Researchers in the area of Sign Language and Sign Language Interpreting have discussed various philosophies and teaching approaches related to oral, augmentative and alternate Communication while handling Children with Hearing Impairment. To some, sign language interpreting was treated as a technical endeavour or a problem to them, yet all Children with hearing impairment needed to communicate, get an education, and understood in the societies where they lived (Einer, 2004). Interpreters working in Schools and other institutions of higher learning face different challenges which go on unnoticed due to limited knowledge on interpreter code of ethics. There is therefore limited literature and awareness on the work of sign language interpreters in Secondary Schools in Uganda in this regard. A number of studies have also been done in this area but little empirical evidence points to the area

of educational interpreting. This study is also supported by Schick (2004) and Bitters (1976; 18) in their argument about Children with disabilities in mainstream/or inclusive settings. They stated that;

“Truly, the final determiner of whether mainstreaming is successful or not is dependent upon what happens socially, academically, emotionally, and vocationally to the individual”.

This background necessitated doing an in-depth study to find out some of the factors that inhibited successful Interpretation services in an inclusive Secondary School like in this particular study. Most Sign Language Interpreters who worked in Educational Institutions performed their assignments with a multiplicity of challenges comprising of social, economic and cultural backgrounds in which they were subjected to work. They were obliged to work in environments with different rules and codes of ethics and the needs of those whom they served. It is believed that different social and educational backgrounds which concretize these challenges often created intrinsic and extrinsic challenges among them and their clientele they serve (MarSchark, 2004).

1.9 Research Sub-questions

In order to focus on the phenomena to find out and describe the challenges faced by sign language interpreters working in inclusive learning environment, the following sub-questions were adopted to be followed during the research investigation;

- What challenges do the Sign Language Interpreters face during their indoor and outdoor interpreting assignments in the School?
- How do these challenges influence the work of Sign Language Interpreters in an inclusive School environment?
- What are the possible coping strategies (both negative and positive) that can be adapted to minimize the existing challenges?
- What can be done to promote the services of Sign Language Interpreters in such inclusive settings?

1.10 Objective of the Study

Sign Language Interpretation is a desirable service for Children with Hearing Impairment in a welcoming inclusive learning environment because communication plays a pivotal role in developing their positive self esteem and quality of life for Children with Hearing Impairment (Skjørten, 1996, pp2). It is important to secure a favourable learning environment for these children so that these children can favourably learn and compete with other hearing peers, inclusively. The study was designed to examine the existing indoor and outdoor challenges/obstacles faced by Sign Language Interpreters working in the school, in their attempt to support Deaf Children attain education in such a setting. The study vested its interest in identifying copying strategies that could possibly be adapted to delimitate the challenges identified.

1.11 Significance of the Study

This study followed a long period of segregated “*special education*” where Deaf Children were isolated in mainstream Schools units with few teachers trained in special needs education. The study findings are expected to sensitize the general community and families of children with hearing impairment on the significance of sign language interpretation services and a need to adhere to their code of ethics. Upon completion, the study will act as a guiding paper to policy makers and stakeholders, employment agencies so that interpreters are accorded better treatment as support staff. The findings are hoped to influence policy makers to redirect their policies in the field of special needs education training as a prerequisite in different settings. For example the need to train Sign Language Interpreters to work in the public sector like; courts of law, post-secondary institutions of learning and hospitals. It is expected to highlight a degree of social and professional relationship among other service providers in regular schools with a primary focus on the area of Sign Language Interpreting. The findings are hoped to simulate further research in the field of deaf education. It is expected to clarify the impending inter-dependent role of

interpreters and their professional ethics in the education arena generally.

Nevertheless, stake holders are expected to gain a deeper understanding of the value of interpreting in an ethnic country like Uganda with diverse cultural demands and identities.

2. Theoretical and Conceptual Foundations

The study was about the Challenges faced by Sign Language Interpreters working with Children with Hearing Impairment in an inclusive Secondary School setting. This Chapter presents and discusses related literature from studies about hearing impairment and Sign Language Interpreting. Specific attention is, however, drawn to; *Ugandan Sign language and its use, Hearing Impairment, Sign Language Interpreting and Inclusive Education* with a primary focus on the role these themes play in inclusive education and interpreting. The chapter first presents a theoretical perspective on which the study was based and describes its conceptual frame work in sections, in that order.

2.1 Theoretical Foundation

Bloom and Lahey (1997) Theory of Language and Communication

There were other related theorists that could have been used, but for purposes of this particular study, I preferred to use the Theory of Language and Communication as advanced by Bloom and Lahey (1997). The literature reviewed is therefore discussed with reference to this theory. Bloom and Lahey (1997) described Language as a code that represents ideas through a conventional system of arbitrary symbols for communication. According to Bloom (1997), these symbols are believed to enable individuals to share or exchange information and ideas. This means that for any meaningful exchange of information that should occur between individuals, the parties involved should have codes that they can understand and use effectively. Bloom et al, defined Language and Communication as a process by which individuals exchange information and convey ideas. It is an active process that requires the sender who formulates (encodes) a message, and a receiver who comprehends (decodes) the message. In communication, each partner is expected to be alert about

the needs of the other for effective message delivery and understanding of any given information. Bloom and Lahey (1997) suggested that the source Language (Spoken or signed), for this case, through Sign Language Interpreters, who act as a bridge of communication between Children with Hearing Impairment and the hearing peers must be bilingual. According to this theory, the symbols used in a language can be sub-divided into three components; **Content**, **Form**, and **Use**. **Content** represents the words in a language and their meanings while **Form** represents the elements such as grammar which connect sounds/signs with meaning. **Use** refers to the rules governing the use of a language in different contexts, target population and communication environments. All the three components are considered important in order to facilitate effective communication. Bloom's assertion follows a person's competence in a language, which may pose challenges to the work of Sign Language Interpreters in different environments of competing voices, cultural, professional and ethnic identity. The influence of the above theory will therefore be discussed in the literature reviewed in the conceptual section that follows.

2.2 Conceptual Discussions

Ugandan Sign Language and its Use

Uganda Sign language (USL) is an indigenous visual/gestured language based on the use of both manual and non-manual features used by the Deaf and hearing community in Uganda. Ugandan Sign Language is not universal. For example; Deaf people from Norway, Kenya, Palestine, Finland and United Kingdom or Ethiopian use different sign languages in their countries based on their cultures, norms and the environment in which they live. However, a universally accepted code of ethics and sign language for all international interpreters exists but used by very few professionals in this field. Sign Language is perceived through sight and produced with the hands, body, face and the head other than through oral channels. The hands mainly produce the manual signs while the other parts of the body namely; body, face

eyes and mouth produce the non-manual features (Uganda Sign Language Dictionary, 2005). That is why the Deaf² people concentrate more on the face other than the signs during communication. In Uganda, Deaf people use sign language as their primary natural language or mother tongue which is closely related to their cultures, values, customs and history of their communities where they live. Ugandan Sign Language can also be used by other people who are not Deaf but work and live with them (Lule, 1996). This language is not based on nor is it derived from any other numerous local spoken languages/dialects spoken in the country. According to linguistic studies, all sign languages fulfil the requirements for a natural language. In Ugandan, Sign Language has been legalised as a language officially to be used by Deaf people and other service providers (Uganda Government Constitution, 1995; Chap.37). This legality matches with one of Uganda National Association of the Deaf (UNAD, 2004)'s objective;

“To fight for the official recognition of sign language as a language of the Deaf people in Uganda to further education and equal rights”

This milestone recognized the need to train Sign Language Interpreters to support Deaf people in Schools and other educational training institutions. Although other writers have argued that Sign Language is a natural language of the Deaf people, becoming a Sign Language Interpreter(s) is not automatic; it is challenging in a complex environment of competing voices like in an inclusive secondary school identified. It requires skill, commitment and training.

Hearing Impairment in Uganda

Educationists have attempted to define hearing impairment in various ways. However, several factors determine its meaning, namely the degree of hearing loss, age at which the loss occurred and the type of this loss. These levels range from mild to profound. It is a term that covers the entire range of auditory impairment, encompassing both the profound Deaf and those with mild loss (Moors, 1996). In

² Deaf with upper case ‘D’ is used to refer to Deaf people who share a language (Sign Language) and cultural values in a community of Deaf and hearing people (World Federation of the Deaf, 1993).

Uganda, the term '**Deaf**' is commonly used among the community but the term **Hearing Impairment** is now predominantly being used by educationists. While the Deaf community wishes to retain their identity used in their expression in a broad sense, they still believe that Sign Language and the use of Sign Language interpreters is their acceptable mode of communication between the Deaf and hearing people who do not understand a common language. (UNAD, 2003)

Deafness

Firisna, (1974), in Kirk and Gallagher (1989: pg. 300) referred to a Deaf person as; whose hearing is disabled to an extent ... that precludes the understanding of speech through the ear alone, with or with out a hearing aid. The audiologists look at Deafness as living under absolute silence. Not all persons considered Deaf are really Deaf (Ling in Eron, 1996). Although the largest groups of people who are considered "**Deaf**" are those who have mild hearing impairment, these group that has a certain level of residual hearing which can be stimulated by the use of a hearing aid, are referred to as 'hard of hearing' (HH). Hard of hearing denotes the presence of residual hearing that enables the process of linguistic information with or with out amplification. Kirk *et al* (1989), notes that sign language interpreters' face challenges with this group because they mostly prefer lip reading. Hence the element of speaking and signing at the some time often distracts the perception ability and message delivery by the sign language interpreters. According to Tigerman (1997) in Okwaput (2000), the measurement of one degree of Deafness is indicated in decibels;

Hearing Levels

- 26-40 db
- 41-55 db
- 56-70 db
- 71-95 db and 96 decibels and above.

The above categories of deafness are classified as mild, moderate, moderately severe, severe and those in the category with 96 decibels and above are regarded as

profoundly Deaf. All these categories may in one way or another require the services of sign language interpreters, when their hearing is finally lost.

Sign Language

Sign language is one of the systems mostly used in interactive communication with or by persons who experience difficulties in oral communication as already explained above. Sign language is a visual-gestured language which involves the use of hands, eyes, mouth, mimics, and body movements (World Federation of the Deaf, 1993). A manual alphabet (finger spelling) may also be used along side sign language. Like many oral languages, sign language has a linguistic structure, which can be learnt through interaction with people with hearing impairment and other people who know it, while studying its theoretical concepts to understand how it is used in its greater detail. As already mentioned in the introduction, Ugandan Sign Language is not universal, which implies that its use and meaning is perceived differently and is challenging when used in different regions/countries with people of different linguistic backgrounds all together. It is a language recognized as a fully developed human language independent of oral languages (Armstrong et. al, 1995).

Ugandan Sign Language has been legalized in the national Constitution (Government constitution, 1995). However, it has met challenges in an ethnic and a multi lingual community in Uganda with various dialects. Richard Dimpleby & Graeme Burton, (1992) argued that communication between the Deaf and hearing people, who do not understand the common language, often got support from Sign Language Interpreters. The passage of linguistic information in form of signs from these sources, have had noticeable challenges like in any language. Richard et al., (1992) explains that many years of linguistic research have gradually revealed systems of ‘gestures’ as natural human languages which requires physical competence in terms of expression and extracting meaning. He pointed out that where there is only one Sign Language Interpreter doing an interpreting assignment, may be overworked as a result of continuous body movements and comprehension. Richard (1992) further noted that at one time interpreters can easily be misunderstood and hence possibilities of

changing the meaning during simultaneous and consecutive interpreting processes with competing voices are therefore inevitable. Simultaneous interpreting here means when an interpreter voices or signs the information at the same time when a conversation is in progress. While consecutive interpreting allows lag time between the sender and receiver during message delivery. Simultaneous interpreting was applied to the setting studied in school B of this research. This argument supported the fact that the interpreter's perception and his/her cognitive abilities diminishes if there is no co-interpreting in all the assignments involving signing and voicing.

Vonen, (1996 p.44), argued that sign language utterances, just like any other spoken language utterances, analyzes sequences of a combination of distinctive features. He described the features as units that do not carry meaning by themselves, but combine into and distinguish between larger, meaning-bearing units. Vonen (1996), gave examples of common distinctive features in sign language as palm orientation feature 'down' (as opposed to, e.g., 'up') and the location feature 'nose' (as opposed to, e.g., 'eye'); examples of common distinctive features in spoken languages, by comparison, are the phonation feature 'voiced' (as opposed to, e.g., 'unvoiced') and the nasality feature 'oral' (as opposed to, e.g., 'nasal'). The typical meaning-bearing combinations of features in sign language such as this are signs, while the typical meaning-bearing combinations of features in spoken language are the words. Combined together in use by interpreters of different educational and linguistic backgrounds, this may change according to context and meaning.

This observation applies to the school of study where Deaf and hearing people from different backgrounds were included in one class. Vonen also echoed the fact that voice diction determined the meaning of the interpreted messages and re-enforces the fact that challenges of flexibility in an attempt to convey desired utterance(s) to the target audience, was often overlooked by Sign Language Interpreters during simultaneous interpreting. He regarded this as a challenge to interpreters in their attempt to answer voiced or signed information during indoor and outdoor activities with a large hearing clientele. His explanation is in line with my sub-question 2 of

the study. Venin (1996) further noted that interpreting for scientific lessons demands for clarity in presenting scientific facts. He maintained that the element of negative feedback from the clientele may be due to lack of understanding among the interpreters and or the parties involved in dialogue. He clarified that most teachers expect learners to understand interpreted concepts in totality, in such complex settings since they are equal in the same setting. This is no exception of Uganda, where there are interpreters who may not have had abilities to comprehend complex linguistic vocabulary from fast speaking teachers and competing voices in the class. While observing different interpretation assignments in the identified setting, I confirmed Vonen's interpretation. I noticed that Interpreters who used simultaneous interpretation approach were challenged by visual perceptions and comprehension of meaning by children with hearing impairment. For example when it came to random raising of hands to respond to the teacher's comments in the class, some interpreters lacked interpreter power³ so that the speaker(s) matches time lag and sequences of utterances to their understanding of the voiced or signed messages.

However, Schick's observation of challenges in regard to the planned lessons did not clearly address the issue of detractors which ranged from audio and visual noise in such inclusive environments. Moving children and objects through the class windows, audio and visual noise in the school compound distorted effective interpreting assignments. Similar studies were done by Langer & Schick, (2004) in an inclusive school setting. Their findings suggested that educational interpreters had considerable difficulties representing all aspects in the message that had direct relevance to classroom instruction. They argued that interpreters with inadequate interpreting skills rendered the classroom content incoherent. His suggestions emphasize the fact that sign language interpreters with weak linguistic skills did not simply modify or use a résumé approach to simplify the teacher's messages. This kind of omission of concepts that were not understood in an interpreted version by

³ Interpreter power: In this case refers to assertiveness in Sign Language Interpreters for them to have some degree of control in the ongoing verbal or non-verbal conversations involving Deaf & Hearing people (World Federation of the Deaf, 2001).

Deaf Children therefore posed tremendous challenges to interpreters. Although Langer *et al.* did not explicitly clarify the fact that simultaneous and consecutive interpreting has a bearing on these assumptions. However, these arguments still hold water. Schick *et al.* reasoned that it was challenging for most sign language interpreters to use a résumé⁴ approach. However, this could not be equated to the rigid teachers' pedagogic approaches in the Ugandan educational context, which could to be erroneous. Following a study by McCay Vernon, and Jean, F. (1990), they also argued that Deaf people with minimal language competence are those who did not speak well, did not read or write well, and are therefore not familiar with English as a common medium of instruction and were not easily followed by interpreters. McCay et al did not however, emphasize that English as a foreign language from the mother tongue which needed to be learnt just like sign language. This did not mean that either the deaf or Interpreters were not intelligent.

By virtue of their isolation from the hearing community and linguistic vocabulary, deaf children were bound to pose challenges for the interpreters during communication. These categories might have developed their “*home signs*” or local gestures and therefore comprehending interpreted messages becomes problematic. McCay admitted that Deaf learners, who enrolled in school at a later age with no linguistic backgrounds, posed the most difficulties to the work of Sign Language Interpreters. In this case, it is an obligation for all Sign Language Interpreters to adjust their signing/voicing styles to suit the levels of their understanding. However, in a classroom situation, repetitions and pardons disrupts the communication process in this regard. McCay acknowledged that this had an affect on the interpreters' span of short term/long term memories and lag time that causes a delay in message delivery from the source language to the target language/audience. This implies that relevant information is some times lost or ignored in this regard. I should point out that considering the rigidity of the nature of interpreted class lessons in Ugandan

⁴ Resume: In this case: a summary of an Interpreted voiced or signed Educational text or verbal information.

schools where dictating notes in high school is the order, McCay's arguments may be overwhelming. However, the concerns presented are worth noting.

2.3 Sign Language Interpreting

Educational interpreters are professionals who play a pivotal role in facilitating communication between students with hearing impairment, their teachers and hearing peers. Educational interpreters have special professional knowledge/skills, and credentials that qualify them for this service. Educational interpreting can occur anywhere (e.g. in the classroom, laboratory, dining hall, games and sports, shop/canteen etc.). These are places where Children with Hearing Impairment learn and interact with each other. Sign Language Interpreters are expected to be bilingual, meaning that they are expected to be fluent in two or more languages of communication. For example; Ugandan Sign Language (USL), British (BSL), American (ASL) or Norwegian sign language. Interpreters are bicultural professionals sensitive and responsive to environmental factors which foster the message to be conveyed. They are expected to take the message as *expressed* in the *source language* and express the meaning in the *target language*, to be accessible to the users while following a specific code of ethics and practice explained below.

2.4 Sign Language Interpreters Code of Ethics

Sign language interpreters adhere to a code of ethics which include;

- Keeping all assignment-related information strictly confidential
- Accurately rendering the message by faithfully conveying its content and spirit
- Exercising impartiality by; not to counsel, advise or interject personal opinions related to interpreted assignments
- Use the preferred language of the person(s) to whom they are interpreting

- Accept assignments using discretion with regard to the interpreting skills required, the settings and the persons involved
- Supporting and furthering the interest of their profession and colleagues by fostering trust and mutual respect...

(Source: World Federation of the Deaf, 1996)

2.5 Interpretation Services in Schools

Schick, Williams, & Bolster, (1999), identified that many Deaf students accessed general education curriculum in an inclusive school environment in part, by using the services of a sign language interpreter(s). They argued that even with the services of a highly qualified interpreter, it was believed that, full access by children with hearing impairment to the content and social life in a hearing classroom or school environment, could be challenging to sign language interpreters. They further argued that providing full access to a hearing classroom is very challenging and complex. It involved more than just the skills of the educational interpreter. For example all the assignments require positive attitudes of the teaching and non-teaching staff working along side the interpreters. Schick et al. criticism was based on the understanding of accuracy involved in representation of all classroom communication as extremely challenging when he said in his words;

“...Class room communication is distributed amongst many speakers, and an understanding of the content requires an interpreter, to integrate simultaneously what many individuals have to say, not only the teacher”

The above observation reinforces a challenging fact to represent all kinds of discourse which often results in the shift in register as well as the speaker. In this case much time lag can be registered, a process this tires the interpreters. This requires a need to keep pace and track of all that goes on during communication and affects turn-taking. Schick maintained that this type of information seemed difficult for the interpreters to convey as accurately as possible with out distorting its meaning. However, he does not offer us solutions here and leaves more questions to be

answered which calls for further research in the area of communication. Schick et al. (1999) explanations did not explicitly pointed out the challenges associated to turn taking and preparation between the teachers and the Sign Language Interpreters, considering the phenomena of inclusion. This fact follows the rigidity of the Ugandan School curricular, coupled with negative attitudes and the fixed lessons which do not give room for flexibility and adaptation as explained above. Obviously it is revealed in the above explanation that sign language interpreters need prior briefing and reading through the subject matter before engaging in an assignment. All in all, Schick et al. focused more on attitude and relationships which was the part of this study. The question that needs further research is; *how are environmentally motivated factors and employment policies considered in the work place?* Although he argued for the importance to recognize important concepts being mentioned simultaneously, expressions like; his Excellency, his Highness, his lordship, her majesty, and mixed erroneous expressions are likely to cite wrong impressions and misunderstanding in interpreted communication.

Marschark et al., (2004), also expounded the fact that even in optimal operational learning circumstances, little is known about what students who learnt through an interpreted education. Marschark et al., (2004) observation reaffirms the lack of trust and negative attitudes exhibited by stakeholders in the inclusive schools. To counter his understanding, he seemed to have overlooked the element of performance and skills that such Children with Hearing Impairment may have during outdoor and indoor instruction with the interpreter. Fernandez-Viader & Fuentes, (2004), also argued that, for many Deaf and Hard-of-Hearing students, provision of an interpreted education is a requirement in order to support classroom communication. They emphasized interpreting as one aspect of providing access to all teacher and peer communication in a school. They maintained that the presence of an interpreter allows Deaf students to learn in the same manner as their hearing peers in inclusive classes.

Fernandez et al. emphasis does not draw distinctive roles and responsibilities of sign language interpreters and the school administrators, who tend to attribute most of the concerns of Children with Hearing Impairment to the Sign Language Interpreter as far reaching than just labels as '*...interpreters will sort it out*'. Expressions like this were demoralising and indicative of overworking the interpreters because a shift of decision making responsibilities on the part of interpreters, on behalf of Children with Hearing Impairment brings misunderstandings and poor relationship between them (World Federation of the Deaf, 1993). In addition, language errors, omissions, and distortions by semi-qualified interpreters may be detrimental when it comes to discussions with teachers with different training and ethical code of conduct. In this case, young hearing children may not have the cognitive skills to realize when a message is incomprehensible and are unable to correct the interpreter in action.

Mark Man, (1977) in his study, found out that hearing children in their third or sixth grades do not spontaneously recognize their own comprehension failure when they are presented with material that has obvious inconsistencies and contradictions. Mark man, (1977), concluded that the cognitive skills required to process and identify the source of such misunderstandings are complex. He added that even the hearing pre-adolescents can not manage this on their own. This cognitive process required that interpreters monitor comprehension, through meta-cognitive skills, which most interpreters may not have due to educational inequalities and professional development. The difficulty in dealing with adolescents at this stage poses great challenges to interpreters working with them and who have had psychological problems in such inclusive educational settings.

This view was still supplemented by Mark Man, (1997), when also studied hearing children who had age-appropriate language and perspective taking skills and communicated directly with their peers and teachers. He noted that in inclusive school settings, there were children with hearing impairment, who had language delays as compared to the hearing peers in their day to day interactive activities. He cited this as a challenging for interpreters as they attempt to lift them and cement

relationships with the teaching and non-teaching staff with diverse expectations besides Sign Language competence in such environments.

Schick, (2004), also pointed out that it was an obligation for Children with Hearing Impairment to monitor comprehension even more closely than their hearing peers. However, there are challenges by lots of voiced or signed errors characterized by pardons and clarifications, as communication goes on in a class room environment with competing voices. Dissatisfactions due to unclear concepts from the speaker(s) in this case demoralize interpreters in this regard. The World Federation of the Deaf (WFD) in its Code of Ethics advocates that comprehension, monitoring and negotiating, and clarifications are the consumer's responsibility. The interpreter only provides a faithful rendition, and if there are any related problems in class or this case, the teacher and Deaf students should handle it only through the interpreter (International Registry of Interpreters Publication, 2006). The American registry of interpreters (RID) emphasized that sign language interpreters convey classroom information but are not solely responsible for the students' comprehension abilities. In reality, this model is more appropriate for an autonomous and independent ordinary adult Deaf or hard of hearing person but is seen as challenge in an entire inclusive educational setting similar to the one studied. This contradicts the principles of inclusion which strives to ensure meaningful education for all.

Johnsen, (2001, pg. 266), outlined the eight frame factors necessary to fulfil the plurality of individual differences in inclusive educational settings. These principles include; the pupil, communication, content, assessment, strategies and methods, the school intentions and other frame factors. Johnsen (2001) highlighted communication and economics as a widely talked about phenomena. While economics in most annual budgets in most countries, she argued that it had got the nick name "*The law above the laws*". In Uganda, budget allocation to education influences the possibilities of implementing the intentions of education for all (EFA). This allocation is not adequately done to cater for such assistive services like Sign Language Interpreting services in schools. The misinterpretation of economics in

Uganda therefore has had tremendous negative impact on advocates and implementers of inclusion. Inherent in deaf – interpreter relationship, is a dimension of hostile-dependence (McCay et al 1990). Hostile-dependence feelings emerge when a person must depend on another for some need yet feels angry toward that person at the same time due to conflicting expectations. It is difficult for any human being to be as dependent on another as a Deaf person is on an interpreter for his education. Inevitable, this power leads to consequent anger on the part of the deaf persons and interpreters as well. When things go wrong, the deaf person may blame the interpreter not himself/herself or the person whose speech was interpreted. Questions concerning the effectiveness of educational interpreting need to consider in the interpreter and the student as well as the instructor and the setting (Ramsey, 1997). On the interpreter side, Schick, Williams, and Bolster (1999) suggested that educational interpreting is unlikely to provide deaf students with full access to instruction. They evaluated interpreters' skills in American K-12 educational settings, by using videotaped samples of expressive production of classroom content and receptive performance from a standardized interview with a deaf student. Their assessments took into account factors such as students' grade levels and modes of communication. Schick et al. found that less than half of the 59 interpreters they evaluated performed at a level considered minimally acceptable for educational interpreting. They concluded that many deaf children are denied access to classroom communication because of the skills of their interpreters.

Johnson (1991) investigated challenges faced by inclusive education implementers in the similar settings, reflected on the interactions of all of the contributing factors noted. She also videotaped graduate level interpreted classes and described several situations in which even when interpreters understood the instructors' message. She noted that communication breakdowns often occurred. Of particular difficulty were situations in which classes involved material that was unfamiliar to students and interpreters and those in which diagrams and ambiguous descriptions of visual-spatial scenes. Beyond the issue of divided attention between visual materials and the interpreter, Johnson (1991), noted that communication via sign language required

visual-spatial detail not required in spoken communication which is some times challenging to sign language interpreters. Related to this, is a study conducted by Preston (1994), when he found out that the interpreting arrangement affects the availability of the roles, because the professionalization of sign language interpreting dramatises the issue. Preston (1994), assumes that there is a sharp division between those who argue for a more mechanistic model of interpreting (translating only the lateral information) and those who advocate making appropriate cultural adjustments and clarifying where necessary. Any attempt at clarification merely sustains the barriers between the Deaf and the hearing people, which he considered challenging.

2.6 Inclusive Education

Inclusion is a philosophy which views diversity of strengths, abilities and needs as desirable as possible, bringing to any community the possibility to develop which leads to learning and growth. The Jomtien Conference (1990) set the agenda for the international community and national governments to promote '*Education for All*'. This campaign was launched when there was already a strong support for integration for persons with Disabilities in all activities of the community, Uganda inclusive. As mentioned earlier, the Salamanca Statement and Framework for Action on Special Needs was also launched with the same quest. The statement goes beyond "*integrated education*" by advocating for "*inclusive education*" (UNESCO, 1994). Also see the process of inclusion in appendix xix). According to Skjørten, (1996), inclusive education means;

"... Adjusting the home, the school and society so that all children can have the opportunity to interact, play, learn, and experience the feeling of belonging, and develop in accordance to their potentials and difficulties and thereby obtain a good quality of life within their natural environments"

Skjørten (1996), argued for change of attitudes and evaluation of the existing knowledge and school structures to accommodate Children with Hearing Impairment. When this does not happen, the service of Sign Language Interpreters as the third

parties meets some challenges. In Uganda, the principle of inclusion has been adapted after the Government White Paper on Education (1992). This paper outlined the need to have Universal Primary School and Secondary Education. Although these policies have registered some success, a lot needs to be done on the role of sign language interpreters in inclusive school settings. However, this thesis focused on cultural and economic aspects in an inclusive secondary School setting. Skjørten, (2001), stated that Inclusive Schools means where all Children are members of the same group, interact and communicate with each other, help each other to learn, take consideration to each other and accept that some Children have got needs that differ from the majority and will at one time do different things. She noted that some of the requirements to make the process of inclusion possible are the provision of professional assistance to Teachers in the form of orientation in Teacher education so that the new Teachers can contribute to the process towards inclusion.

Skjørten's argument about inclusion reinforces the need to inculcate into the teachers the element of co-existence with interpreters in such a setting but unfortunately Uganda has not adequately embraced secondary teacher training in special needs education. Instead the focus is still on primary teacher training. As already noted above, the interpreting and teaching professions have more or less different codes of practice which creates gaps in their working relationships. It is worth pointing out here that my intimate interactions and observations with interpreters in the school B also revealed that the performance of some children with hearing impairment was some times poor partly because some of the children with hearing impairment were slow learners and copy notes from relatively dull hearing children in class. Sign Language Interpreters carried the blame and yet this would not be the case to this effect. UNESCO (2003) affirms that inclusion is

“Dynamic approach of responding positively to pupil diversity and of seeing individual differences not as problems, but as opportunities for enriching learning”

Inclusion is seen as a process of addressing and responding to the diversity of needs of all learners through increasing participation in learning, in cultures and in

communities, and reducing inclusion from within to broad education. Inclusion emphasises providing opportunities for equal participation of persons with disabilities (physical, social and/or emotional) whenever possible into general education, but leaves open the possibility of personal choice and options for special assistance and facilities for those who need it (UNESCO, EFA, 2003). The primary focus of Chapter two was to highlight some of the theoretical and empirical evidences in similar situations, regarding the challenges encountered in the provision of sign language interpretation services. Key issues reviewed focused on; Ugandan sign language and its use, Sign Language Interpreting, attitudes and communication strategies, motivation and individual perceptions about the principle of inclusion in an environment of different beliefs and the plurality of individual differences.

3. Methodology

This Chapter presents the approaches used to gain answers to the problem under study. It explains the study design, the target population sample and its identification criteria, methods and the instruments that were used to arrive at the findings. Two languages were used to collect data which include; English and Sign Language. Sign Language was used to get views from Children with Hearing Impairment which were later translated into worded English. While verbal English language was used to interview other hearing informants.

3.1 Research Design and Methods

In an attempt to gain a deeper understanding and to present a description of the existing phenomena, I chose to use a Qualitative Case Study Design. I preferred this design because it enabled to carry out an in-depth investigation of the phenomena in its natural context (Gall et. all, 2003). It was flexible and permitted a direct interaction with all the informants involved. The design helped understand feelings and first hand information from informants themselves about the phenomena and its influence on the work of Sign Language Interpreters in an inclusive setting studied. Gall et all,(1996), argued that it is difficult to generalize the findings from a case study, however, for purposes of this particular study, it is the readers' choice to apply research findings in their related settings where Sign Language Interpretation services are provided. The design was flexible and allowed to use a variety of data collection methods and instruments such as informal and formal interviews and observations, in order to strengthen and safeguard validity and reliability of the study data.

3.2 Target Population and Sampling Procedures

Uganda is a relatively large country with many private and government-aided Secondary Schools spread in all the four regions in the Country. The study focused

on all Sign Language Interpreters working in one government-aided Secondary high School in the eastern region from where the main informants were identified. The School was suitable because it practiced the principle of inclusive education. Considering the scope of the study problem, I involved secondary informants in order to maintain variety in perceptions. Key informants included; Classroom Teachers, Children with Hearing Impairment and the Hearing Children. This was considered because I could not talk about main informants, without getting the views of the other cases since they were in the same working environment. These informants were also included with the aim to strengthen and validate findings from the main informants.

3.3 Study Procedures and Identification of Research Informants and the Empiri

Aware of the aim of the study, I considered **Purposive Sampling** to achieve this aim. The approach helped to choose informants that were “**information-rich**” (Patton in Gall et al, 2003; pg. 178). I carefully identified informants that enabled getting a comprehensive understanding of the problem under investigation. The research participants included; 4 Sign Language Interpreters, 2 Children with Hearing Impairment, 2 classroom Teachers and 2 Hearing peers. The decision to involve additional informants was to get additional and balanced responses through a triangulation approach for validity and reliability purposes.

3.4 Identification of the Study Empiri

As a matter of procedure, I set out the following criteria to identify the research area;

-
- being a government-aided Secondary School working towards the principle of Inclusive Education
 - having employed Sign Language Interpreters
 - accessible and welcoming
 - enrolled Children with Hearing Impairment in all classes (i.e. from senior one up to senior six)
 - have a good historical background related to special needs and education of Children with Hearing Impairment

I preferred a government aided Secondary School because it is the governments' responsibility to provide Education to all Children of School going age; irrespective of their backgrounds and any kinds of Disability they have (Uganda Government Constitution, 1995, White Paper, 1992). To identify the School, I contacted the head teacher in School B, where I did the main study. I also met the heads of the Educational Assessment and Resource Centre (EARS) in the District where the School was located to get further guidance. I presented to them my letter from Oslo University requesting for their permission to allow me carry out research. The head teacher in school B allowed using facilities in the School like the internet services and the resource room. Resource rooms enriched my literature review chapter. It was necessary to meet the head teacher because he is an important implementer of government education policies and I believed that the study findings would be useful to his school and other similar schools in other regions upon completion. The Deputy Director of studies provided additional information needed. He was also a close associate of Teachers and Sign Language Interpreters in the school.

However, I had to eliminate School A, from the central region, where I had initially planned to do the pilot study because it did not meet the set criteria for selecting the empery which I had developed earlier. The reason for dropping School A was because it had enrolled only Children with Hearing Impairment and had not employed Sign Language Interpreters except the teachers with Special Needs Education which was not my focus. School B in the eastern region, suited very well

in my study plans. Basing on these considerations, doing research in School B was therefore deemed necessary.

3.5 Identification of Sign Language Interpreters

In order to achieve the objectives, I identified a few informants from the target population i.e. 4 sign language interpreters and key informants. According to Gall et al (2003), key informants will give information which would otherwise not be available to the researcher. Sign Language Interpreters as main informants were identified using the following criteria;

- ability and knowledge in Ugandan Sign Language
- educational backgrounds/qualifications
- working experiences
- gender balance

The ability to communicate in sign language was set as the first priority because Sign Language was the core language used by the Interpreters to Children with hearing impairment and the hearing people in the School. However, I present below, the conditions that existed in School B, which dictated my choice of Sign Language Interpreters in the study.

Findings from School B reflected the nature of the problem under investigation. I first visited the school where I met the head teacher who had earlier received my letter of request to do the study there. During this meeting, the head teacher introduced to me one of the pioneer Sign Language Interpreters in the School and he briefed him about my presence. He requested the interpreter to co-operate with me during my stay in the School for the whole research exercise. I therefore considered this particular interpreter as my gate keeper because he helped to prove identities of the kind of informants I needed to include in my main study. I shared with him the criteria I had set out to use to identify the main and key informants. During this time, I also met with two Sign Language Interpreters in the School who had trained as

grade three Primary School Teachers. They doubled as permanent employees in the neighbouring Primary School for the Deaf Children, just a few meters from School B. I therefore considered them viable informants to be involved in the study. The third Sign Language Interpreter consulted informed me that he had worked in the School for two years and had no formal training as a certified professional interpreter. The female interpreters identified also informed me that they had trained at University and qualified with Diploma certificates in Sign Language Interpreting and had had working experiences of two (2) years.

The fourth male Interpreter qualified as a grade five teacher and held a certificate in Sign Language Interpreting. He had also worked in this School for six years (by the time of data collection). These background information and characteristics were in line with the criteria I developed earlier in my study plan. Interpreters with different educational backgrounds were identified in order to maintain variety that helped draw concluding remarks in the discussion and recommendations finally. The element of gender coupled with their working experiences were paramount in this study since the area of study was a mixed boarding School and the school had employed male and female interpreters. There was a possibility to identify different challenges from them as the focus of study.

3.6 Identification of Children with Hearing Impairment

In my study plan, I had recommended two Children with Hearing Impairment as my secondary informants. In order to identify the children, the following criterion was followed;

- ability to communicate in Sign Language
- should come from Ordinary and Advanced level classes ('O' & 'A' level)
- should be in the boarding section and benefited from sign language interpreters
- nature and the degree of Deafness
- Gender

I include their ability to communicate in sign language in order to get information directly from the Children themselves since I also knew how to communicate in sign language. I needed the Children to provide additional information since they were direct beneficiaries of the interpretation services in the school. I took this decision with the belief that the Children could be aware of the challenges faced by Sign Language Interpreters which could as well affect them as beneficiaries. I had to interview Children with hearing impairment personally, not through an interpreter since the problem of study centred on the interpreters. The Children with Hearing Impairment were expected to give additional information because I had confirmed their association with Sign Language Interpreters, following my earlier observations in the school activities during my initial visit to the school.

For purposes of variety, the element of gender balance was considered when selecting these Children after confirming that there were both female and male interpreters working in the school. Children were identified from Ordinary and advanced class levels because Sign Language Interpreters worked with them in those classes for a long time. I had to agree with the Children on the appropriate way to interview them. They allowed me to use a small Video Cam coder to film their responses during all the interviews. Interviews were filmed through one volunteer student who was not involved in the study. I had explained to the volunteer who filmed during my interviews the need for him to maintain confidentiality in all the information discussed during his presence. These video interviews were later transcribed verbatim by another experienced volunteer Sign Language Interpreter, who was not involved in the study. This volunteer interpreter translated them before I also did it myself. This helped in validating my findings. The interpreters identified also briefed me about a Deaf girl who had been suspended from the school the previous year. Basing on this information, I included the deaf girl as my second informant with the belief that she was one of the information rich cases to reveal needed information about the problem. I informally met with the Children with Hearing Impairment in the school who had transferred to the School from the neighbouring countries, (Tanzania and Kenya). During my informal interactions with them, I

realised that there was a difference in Signs they used from the signs used by sign language interpreters and some Deaf Children in the School in school B. Though they did not constitute my study informants, I relied on this informal observation notes in the field that helped point out a few salient features relevant to my study problem.

3.7 Identification of Hearing Children

In order to have balanced views about the study problem, I had to include two hearing Children. The Children were identified from Ordinary and advanced level classes basing on the following criteria;

- Should be close associates of Sign Language Interpreters for quiet a long time
- understood basic sign language
- shared the boarding section with Children with Hearing Impairment
- should have studied in the school for more than three years
- came from different regions

By adapting the above criteria, I hoped that the hearing Children with basic sign language had additional information concerning the phenomena under study. I believed that they had the opportunity to share their experiences with Sign Language Interpreters since they could hear and communicate with each other verbally.

However, in an attempt to establish different perspectives from the Children, I also included Hearing Children who were close associates with interpreters in the school.

As already mentioned in the previous sections, the main study was done in School B. During my first exploratory visit in the School, I met the School head teacher who had earlier received my letter of interest to get his approval to do the study there. The Hearing Children were also identified during this second week of my visit. It was common to see Hearing Children in the company of Children with Hearing Impairment and Sign Language Interpreters, as they communicated to each other in Sign Language. I later asked the Deaf Children and Interpreters if the hearing boys

and girls in their company understood their communication in sign language. They all answered in affirmative that ‘yes’ because hearing Children had been long time friends of Deaf Children in the School and had picked some basic Sign Language. They also confirmed to me that the hearing children always supported Deaf Children in the classroom whenever Sign language Interpreters were not available due to some reason.

Identification of Classroom Teachers

The class teachers provide additional information to what was obtained from other informants. Two teachers, (female and male) participated in the study. The teachers were identified from Ordinary and Advanced level classes because they had deaf children in their classes and therefore worked with Sign Language Interpreters in those classes for quite a long time. I took this decision basing on the understanding that the ‘Classroom Teachers’ (as they are commonly known in the Ugandan Schools’ context), had additional responsibilities in the School and would therefore provide additional information to the research problem. The Teachers acted as checkmates to validate the data. Apart from obtaining formal information from the class teachers, I also had informal interactions with the other teachers during my intermissions with them in the School compound. I noted some preliminary information in my field dairy from them even before I had started engaging the main study. For example one of the teachers informally narrated to me some problems faced by sign language interpreters working with the Deaf students, before my formal interview. I noted this in my daily diary of events to match with the interview and observations as planned later. All in all, the process of identifying informants was quite challenging since it was my first time to venture to do such a study in such an educational setting. No doubt, the eagerness to obtain the necessary information I needed despite the challenges, enabled securing ‘variety’ in the samples as shown on table 3.1 in the next page.

Table 3.1: Summary of Case Informants by Categories:

CATEGORY	1	2	TOTAL
Sign Language Interpreters	2 Female	2 Male	4
Children with Hearing Impairment	1 Female	1 Male	2
Hearing Children	1 Female	1 Male	2
Class Room Teachers	1 Female	1 Male	2
	5	5	10

3.8 Operational Study Methods and Instruments

The study adopted a Case Study design with an orientation of a qualitative data collection criterion. In order to achieve this, I used three methods for data collection that is;

- Formal Interviews
- Participant observation and
- Informal methods

Formal Interviews

The interview method was used as a primary data collection method and observations as the secondary approach. Interviews helped to get first hand information from all informants on the phenomena under investigation (Gall et al. 2003). Compared to questionnaires, the interview method enables to recognize the behavioural characteristics of informants involved in the study such as; their facial expressions and attitudes. This indicated their feelings about the topic of discussion. Similarly, interviews permitted a face to face interaction with the informants in their natural setting in the school that suited the desired situation (Gall et al, 2003). Interview method was flexible because it could be used almost every where during data collection. It was capable of eliciting data in its great depth. This methodology is also supported by Michael Patton, in (Gall et al, 2003), who described three basic approaches involved qualitative data collection through open-ended interviews. In this case, I adapted one of his approaches, the semi-structured interview method. The latter involves asking a series of semi-structured questions and probing more deeply using open-form questions to obtain additional information, (Gall et al, 2003; pg. 240). The two types of interviews were used; Informal interviews and Semi-structured interviews:

Informal Interviews

As noted in the introduction, the study was about the Challenges faced by Sign Language Interpreters working with Children with Hearing Impairment in an inclusive Secondary School setting. Basing on the understanding that Sign Language Interpreters play a pivotal role in bridging communication gaps between the Deaf and the Hearing people (World Federation of the Deaf, 1993), I preferred to use informal interviews to get additional information from other informants. I strongly believed that information got from informal settings would enrich the study findings. Informal interview approach helped obtain additional information from other informants in the School who were not involved in the main study. I preferred to conduct informal

interviews with some informants in the staff room when the rest of the other class teachers had left to teach in classes. I arranged to meet Children with Hearing Impairment on the school compound during break time. My interaction with informants inside the school internet café earned incite and credibility to the study.

Semi-Structured Interviews

Semi-structured interviews helped to collect data from Sign Language Interpreters, the Teachers, Hearing Children and Children with Hearing Impairment. This approach helped to gain a deeper understanding of the phenomena, as opposed to the structured interviews (Gall et al, 2003). It was a preferred option because semi-structured interviews involved asking a series of structured questions and then probing more deeply using open-ended form prompting questions to obtain additional information (Gall et al, (2003: pg.240). The questions were applied after the pilot study interview guides were refined. However, it was challenging to use this approach since I was confronted by a group of informants with completely different backgrounds other than what I had anticipated in my initial study plan. This necessitated making adjustments to reframe my question approach and language to use. It was also time consuming to use Sign Language in the interviews process which involved keenness noticing all signs and changing signed views into worded English.

Interview Guides

In order to obtain data through interviews, I had to design a suitable interview guide for every category of informants. In doing this, I took into consideration the main research question and sub-research questions. I brainstormed my sub-questions in order to obtain the answers for the main research question. I finally analyzed and refined the study questions in order to comply with a clear interview guide that suited the nature of informants identified for the main study. In order to assess the effectiveness of the interview guides, I pre-tested them with the lecturers and Sign Language Interpreters at the University where of the pilot study. The Interpreters

were particularly useful because their familiarity with the contextual frame work and focus of the study situation designed. All the necessary adjustments were done on all the items in the interview guides ready to be applied during the main study.

Informal Observation Methods

In addition to interviews and participant observations, I also involved informal observations which involved narrowing down observable sites for all selected activities taking place within the School relevant to the study. They included keenness to all forms of verbal and non-verbal information that was given by both the Children with Hearing Impairment and the other informants. Apart from informal observations, informal talks with the other teachers and hearing students who did not constitute the study were helpful.

Triangulation

Gall et al. (2003), argues that triangulation refers to any attempts made to strengthen credibility and secure validity of the research data. This meant generating more evidence to validate the research findings. I hoped that by using multiple methods and instruments, it would minimize the element of bias that may arise as a result of relying on only one data collection method and instrument. In this case I involved four categories of informants to enhance credibility of the research findings. These were; Sign Language Interpreters (SLIs), Children with Hearing Impairment (CWHI), Hearing Children and their class room Teachers (CRTs). I involved a neutral person who interpreted the recorded interviews with the Children with Hearing Impairment in order to safe guard biased data translation. Pre-testing the instruments proved a linkage with the chain of evidence and validity through triangulation.

3.9 The Pilot Study/Entry to the Main Study

Gall et al, (2003), argued that it is always important to conduct a pilot study before embarking on the main study. Pilot-testing helped to identify threatening questions

or aspects that could otherwise affect the credibility of my research findings and susceptibility to bias. This was aimed at evaluating the effectiveness of the instruments ready to be applied in the main study. The pilot study was done in Uganda by setting a tentative semi-structured questionnaire for each category of informants. I did not pre-test my instruments while still in Norway because the setting in Oslo did not suit the contextual area of study intended in Uganda. This therefore necessitated pre-testing the instruments while in Uganda. I also hoped that by doing that, it would enhance my interview skills during the main study in the field. The pilot study focused on the relevant interpretation activities that were relevant to the study. This was to ascertain whether the instruments I planned to use were really applicable in the intended context.

The first stage in the pilot study involved getting acquaintance with informants at the University where pretesting was done. This was done, first by introducing the research topic to participants to prepare themselves ready for the interviews. The second stage involved pre-testing the observation guides and the interview guides respectively. I considered this necessary because Sign Language Interpreters fitted in the set criteria; for example some of the interpreters in the university supported students with hearing impairment which was a similar case to the site of study. While considering the fact that some Interpreters involved had the same characteristics, I had to use them for this purpose.

3.10 Observations made during the Pilot Study

Preliminary information obtained from informal interactions with volunteer informants helped to refine the observation guide. Observations that were done involved various interpreting assignments like during staff meetings, classroom and outdoor activities. These observations were not only restricted to indoor activities alone but extended to other interpretation assignments within the School which were of interest to the research problem. Observable events and interactive intermissions with the Sign Language Interpreters helped to refine the instruments used. It was

necessary to do this since one of the lecturers involved benefited from Interpretation services and would help in this regard. The pilot study helped to discover many critical issues addressed in the main study which will be presented in the following chapters.

3.11 Adjustments made after the Pilot Study

After conducting the pilot study some changes on the choice of informants and methods of data collection were made. In this case, I conducted interviews with Deaf Children in a private setting away from distracting visual and audio noise after realising that Ugandan Sign Language was a visual language that could easily be recognized by any body who knew it from the vicinity. This avoided informants withholding some vital information needed. I also noted that there could be a difference between the sets of interpreters and Deaf students I was likely to involve in my main study. I was made to reformat the interview guides to suit their level of understanding. For example, it was habitual for some informants to introduce themselves by names. I had to eliminate this during the main study to safeguard confidentiality since I had already assured them against that. Although their identities would be masked during data presentation and analysis, I made sure that their identities were not explicitly pronounced in the main report.

3.12 Gaining Entry into the Main Study

This section explains the methods that I employed to collect data during the main study. It explains the organization, validity and reliability and ethical considerations and challenges encountered during the process. It was important to obtain permission from the Head Teacher and the District municipality Education official in-charge Special Needs Education of the empery. I personally visited the Head Teacher and the District official to deliver my letter of introduction from Oslo University and my letter of request to do the study there. In my letter of request to the head teacher in

school B, I indicated a brief overview of my topic and how the study would benefit the School upon completion (please see Appendix V). I obtained permission and made three exploratory visits to acquaint my self with school B and the District since it was far from the capital (approximately 250 kilometres). These exploratory visits helped establish suitable accommodation in a guest house for the entire period spent for data collection. It was from these visits that I briefed the Head Teacher again about my research plans in the School and how I had planned to collect necessary information from the informants. As a matter of procedure, the head teacher consulted the director of studies and his deputy and one of the long serving Interpreters in the School. He briefed them about my presence in the School that built confidence and made me get assimilated into the School programs activities during the entire data collection exercise.

3.13 Interviews with the Sign Language Interpreters

Sign Language Interpreters were interviewed since they were the focus of the study and were expected to give first hand information about the study problem. I chose to get information from the four sign language interpreters after they consented to participate in the research. Each of them had worked in the school with the teachers for two years above and they accepted to be interviewed during break time. I interviewed them after interviewing Children with Hearing Impairment and their Teachers, with the aim of validating responses. I used this opportunity to request to carry out observations during their interpreting assignments whenever it was appropriate on the School time table. I had to arrive in the school during early hours as planned for all days of the interviews and observations in order to prepare as planned. My early appearance in the school enabled to locate a suitable interview venue without interrupting other ongoing School activities.

I first held an informal meeting with all volunteer informants to brief them on the over view of the study in a way of a brief chat and introduced my self and the purpose of the research, before proceeding with individual interviews. Interpreters

agreed to conduct individual interviews by way of tape-recording their voices, one at a time. However, this criterion was also suitable to me because it avoided duplicating views and captured personal feelings from the independent persons themselves. I started the interviews by first focusing on the more obvious background information and later proceeded to specifics as refined in the interview guides. Each informant was given chance to listen to his/her voice and to make any necessary changes on what they had actually said. However, none of them made any change on the taped information. I had to re-emphasize to them to feel free and provide any views that they felt had been left out during the interviews since I was still in the School.

3.14 Informal Interviews with the Children with Hearing Impairment

I conducted formal interviews with the Deaf Children and endeavoured to have informal talks with them whenever I had the opportunity to meet them in the school compound. I made the Children aware that at any one some point I needed to talk to them during their free time. They included Children with Hearing Impairment drawn from Ordinary and Advanced level classes. I did not take down any notes during these informal meetings because this would affect my dialogue with the Deaf Children in a sensitive topic such as this. However, I took down brief notes during my time off in the staff room at break and in the guest house, at the end of each day. It was particularly comfortable to talk to the Deaf children during their break time since I also knew how to communicate in sign language. Since I had worked with the national television, most of them were eager to associate and talk to me; although I was also suspicious that this kind of ‘celebrity’ appearance could draw on lookers and could influence obtaining the intended data. Some children need to talk to me even after break time out of curiosity which I considered an inconvenience to their study time. I had to tell them politely to go to class with out offending and making them to stop communicating to me at an appropriate time.

3.15 Participant Observations

Gall et al, (2003) notes the primary focus of observation as always much wider in scope and an observer, observes the behaviours and its environmental setting from a holistic perspective. Gall et al (2003), argues that observation in contrast, allows the researcher to formulate his own version of what is occurring, independent of the participants because inclusion of selected observations in the report provides a more complete description of the phenomena. In this study, I adapted ‘observer-participant role’, considering the fact that interpretation service was practical in nature.

Categories identified from the interviews aided observations. During this time, I interacted with the Sign Language Interpreters casually while they engaged in their work. I preferred to use this approach with the view that being “a complete participant” would probably influence the interpreter’s casual behaviours towards eliciting the responses of my interest.

I also felt necessary to have casual contacts with the interpreters while ensuring that the observed features such as voicing, facial expressions, signing skills could accurately be recorded in greater detail later. The “observer participant role” was therefore appropriate for me. I did observations during and after class hours; during intermissions, School assemblies, and during visits by outsiders to the School. I literally did not inform the informants the specific topics of interest I planned to observe, to avoid influencing their behavioural characteristics and withdrawal. I later took down descriptive field notes which included; the physical settings, reconstruction of dialogue, and description of behaviours using the Lap-top computer I had with me.

3.16 Challenges Experienced during Observations

Main challenges were experienced during indoor and outdoor interpreting assignments. Some times the Sign Language Interpreters could be given abrupt assignments out of the setting I had planned to observe. The sitting arrangements in

the class rooms were not conducive enough since hearing Children could enter and sit in class first and obstruct Deaf Children from the interpreter and the teacher. In Uganda, student teachers/ practicing interpreters are assessed by lecturers while they sit at the back seat in the classes as a lesson/interpreting is in progress. This was a typical situation in which I was also involved. In some situations, the interpreters felt nervous probably because of my presence in class which was inevitable. Students' attention would some times be diverted, for example at one time the Interpreter lost track while interpreting difficult subjects and terms during a gathering in my presence. It was therefore challenging for me to make my own adjustments on the daily School activities to feature in all observable sites. To avoid such occurrence, I consulted class teachers and the interpreters to make them aware of the intention of my presence in class.

3.17 Organisation of Field Data

Organization of field notes

Field notes taken during each event were organised and included the information source, context in which the contact was made, and the method used i.e. observations, informal interviews. In an attempt to reduce accumulating too much raw data, I developed a summery of the main points noted during each encounter with every participant which were recorded in a pre-designed diary book (Gall et al., (2003). This helped me to analyze the detailed notes in relation to the themes identified and then categorised them finally.

3.18 Organization of Audio and Video taped Material

As indicated earlier, semi-structured interviews were used to collect data from the Sign Language Interpreters, the teachers, Children with Hearing Impairment and hearing Children. A Video Cam Coder was used to record interviews from the

Children with Hearing Impairment. The recorded audio and video tapes were labelled indicating the names of the School, corresponding dates of the interviews and the names of the masked informants (for example: informant SLI01, SLI02, SLI03 and so on) to ease transcription. The recorded audio tapes with the hearing participants were transcribed into detailed notes while the recorded video interviews with Deaf Children, were first interpreted by a volunteer colleague before I transcribed in detail, verbatim. I took extra care not to make any alterations on the original information given by the informants during transcriptions.

However, it was quite challenging and time consuming to transcribe interviews from the Children with Hearing Impairment from the Video into worded English language, as compared to verbal interviews I did with the other informants. Dubbing the smaller video tapes to bigger VHS was a cumbersome process. One strategy adapted to organize and analyze the data was by use of categories and sub-categories. The categories were identified from field notes and field interviews gathered from all the informants. I considered the main and sub-research questions key in planning data analysis, one at a time. I looked at the detailed transcriptions and summaries obtained from the field notes and diary, while identifying the corresponding data and clustering it to fit the research questions. By clustering data from each interview, I was able to identify the corresponding categories in the data collected from each informant that helped in analysis and a clear presentation of my data in the next Chapter four.

3.19 Considerations concerning Validity and Reliability of Data

Validity and reliability were looked at in two fold; external validity and internal validity (Gall et al., 2003). External validity referred to the degree to which the results could be generalized or have some relevance to a particular population or similar cases from where the study participants were identified. While internal validity here referred to how the research findings could be influenced by the

extraneous variables in the setting. Reliability is the extent to which other researchers would arrive at similar results if they studied the same case, using exactly the same procedures as the first researcher (Gall et al. 2003; pg. 460). Like in many studies, this study was aimed at finding out a true picture of the phenomena, i.e. Challenges faced by Sign Language Interpreters working in an Inclusive Secondary School Educational setting. However, I should again point out here that I do not intend to generalize thesis findings but it is the readers to make their own value judgments and apply findings in respective contextual areas where interpreting services are used. Validity and reliability of the data was achieved in the following ways as explained below.

3.20 Securing Validity and Reliability

The study secured validity and reliability in the following ways; first by obtaining a chain of evidence that helped to draw linkages between the interview guides, raw data and findings. Pre-testing the instruments helped to make necessary adjustments on the instruments ready to be used to find out the intended study (Yin, 2003). The interviews with key informants helped to validate the views obtained from the main informants. In order to ensure the safety of all informants, interviews were done in quiet and secure environments away from intruding inconveniences. During my initial data analysis, the samples of transcribed interviews from informants were also shared among my fellow colleagues in the same Mphil.SNE Programme in Oslo while we were still in Uganda. I also shared the transcriptions with the main advisor when she came to advise me in Uganda. These colleagues were helpful to verify that the information gathered actually fitted on to the study instruments developed.

Recorded Video Interviews

Translation of the recorded Video interviews with Children with hearing impairment, from Sign Language to English language was done by a neutral colleague, who was himself not involved in the study. The intention here was to ensure that transcriptions

reflected the true picture of what was conveyed by the Deaf informants themselves in a second language by comparing his translation and mine. Narrowing down observable sites to manageable themes from the interviews, enabled getting concretized data with a credible incite into the problem under investigation. I played back the filmed interviews with the Children with hearing impairment to see. The same applied to tape recorded interviews from the information to the informants in order to allow them listen and make any necessary changes if they so wished, which they all did.

Field Observations

Each of the Sign Language Interpreters was observed at least more than three times during different indoor and outdoor interpreting sites in the School, following the observation guide in order to match the desired situations in context relating to the research questions and the themes identified from the interviews. Although some planned observations could be interrupted due to abrupt occurrences in the School like School assemblies, having the observations done in their natural context are hoped to have secured validity and reliability of the data obtained in this context. Informal observations helped to validate the interviews done earlier.

3.21 Ethical Considerations

Aware of the fact that individuals and institutions have their ethics and guide lines during their work and existence in organisations/institutions, ethical considerations were paramount in this study because it enabled to build a good rapport and nurture close relationship with the informants and increased the credibility of the study. I have categorized ethical considerations into three stages; considerations at the planning phase, during and after the study.

3.22 Ethical Considerations at the Planning Phase

Seeking Permission

As mentioned in Chapter One, Uganda has got both government-aided and private-owned Secondary Schools and universities spread in most parts of the four regions in the country. As a result, gaining access to information from any of these institutions necessitated to follow proper entry procedures. I obtained written and verbal permission from the head teacher of the School B who allowed me carry out the study there (see Appendix V). Permission was granted from the District official in-charge Educational Assessment and Resource Services (EARS). I had to get this office informed because Schools in Uganda operate under a decentralized education policy, where the central Government and the Ministry of Education have the obligation to inspect and monitor the operations of these Schools. I considered this ethical to avoid being denied access to valuable information from the informants, in case the School inspectors and informants realised my odd presence in the School.

Informed Consent

In order to secure this, I made a formal request to the Sign Language Interpreters, the class teachers, Children with Hearing Impairment and the hearing students to take part in the study (Gall Borg et al., 2003). A written and verbally request was made to informants before and during my visit to the School. I requested the head teacher to allow informants to participate in my study. By policy, all children and the teachers are under the authority and care of the School head teachers in Uganda. My intention here was to avoid interrupting the normal routine day to day activities in the school, by developing a meeting plan. Involving all the four categories of informants in the study was aimed at instilling understanding of inclusive education in the School identified (see Appendix VI). Although the head teacher had granted me permission to do the research, I had to let the deputy director of studies and the class teachers identified aware of my informal meetings with the deaf children in the school

compound. In addition, the deputy also introduced me during an assembly in the school which built my confidence.

Time frame

I considered time as an important resource while planning for this study. I allocated appropriate time schedules to each and every planned activity to be undertaken in the field for the entire research period; before, during and after field research activities (please see appendix IX).

3.23 Ethical Considerations during the Main Study

During the Interviews

Before embarking on the interviews, I requested hearing informants to allow me tape record their responses. Children with Hearing Impairment permitted me to use a video camera to record their signed responses. I play back the video and audio tapes after each interview, to let them see and listen to confirm what they had actually said. Although this was one way of cross-checking the information given, it facilitated a reflection on the intentions of my study after I had left the scene. I also endeavoured to let the informants know that the School head teacher and the District office had earlier granted me permission to conduct the study with them. This was to build rapport and confidence in them. The names of all informants were coded to conceal their identity and to maintain confidentiality.

During Observations

I had to develop an observation guide that followed a systematic procedure for data collection. Most of the observations were done during outdoor and indoor interpreting assignments. Although the head teacher had earlier granted me permission to execute my study plans in the School freely, I also tried to avoid scepticisms, by consulting the teachers about presence in their classes. However, I

did not interview Children with Hearing Impairment while carrying out observations at the same time in class in the presence of the Sign Language Interpreters because I considered this unethical and breach of confidentiality which I had earlier assured informants. However, considering the fact that sign language is a language expressed openly and can be perceived and understood by any one in the vicinity who knows sign language, I had to be guarded against this.

Use of Pseudo-Names

The use of pseudo names was thought ethical in this study in order to maintain good relationship and mask the identity of the empery and the informants involved in the study. In this thesis, the reader will realise that the names of the study area and the informants have been concealed and kept anonymous. I did this by labelling the Schools with alphabetical letters A and B. Letter B identified the institution of the main study while letter A identified the University of the Pilot Study. I am also aware that this approach may not be viewed as a better option by some readers but for the purposes of this particular study, I deemed it so. It is now the readers' to responsibly apply the research findings to their respective contexts where the phenomenon is applicable.

3.24 Ethical Considerations After the Study

As a token of appreciation to all informants and the school involved of the study, I wrote a letter of appreciation to the head teacher expressing my appreciation for his co-operation and the support accorded to me by all the School authorities during the study period. Copies of this letter were also sent to the District Education Offices (please see appendix: xiii). I thanked each one of the informants verbally after the study, others by telephone. This was significant to maintain good relationship with the participants for future researchers who may go to do research in the same setting.

3.25 Limitations and Dilemmas

Because the study aimed at giving a descriptive picture of the challenges faced by Sign Language Interpreters in one case of an inclusive secondary high School, many would-be-informants in this setting could not get involved in the study and some limitations are given below;

- There were eight (8) sign language interpreters employed in the School with classes divided into streams A, B and C. Only four of them could be involved in the study. It was not possible to involve all interpreters in the school due to the limited time and the nature of their work load they had.
- Although there was need to carry out participant observations for all the interpreters in the school, observations were only limited to the sites related to the study. It would, be too wide and too complex considering the time limits, human resources available, technical aids and financial framework related to the reality of this Master Program.
- It was not easy to use questionnaires to go into depth to collect information, more especially when the information was involving sign language interpreters who were working in such a complex environment and administrative system. Although informal and formal interviews and observations were employed, they may have given only supplementary information for some aspects while leaving out some concrete details of the research problem.
- Although I did the pilot study carefully, some unclear items in the interview guides may still not be clear to the informants. Due to such unpredictable circumstances, it was not possible to modify them when some informants could not understand them. I assumed that this could result into some questions not properly answered and that could have brought inadequacies in final results.

4. Data Presentation and Analysis

This chapter presents an analysis of the data collected from the study. The purpose of this study was to investigate and describe the Challenges Faced by Sign Language Interpreters working with Children with Hearing Impairment in an Inclusive Secondary high School setting. The phrase “*Challenges*” is dominantly used in the presentation and analysis to refer to the obstacles or barriers which were identified to hinder effective indoor and outdoor interpretation services in the School. This chapter reports an investigation on the challenges and their influence on the work of Sign language Interpreters. It also explains the possible coping strategies that informants deemed necessary to apply to overcome the obstacles. Data is presented according to the categories developed from the theoretical chapters and interviews, classified as; *educational backgrounds, communication strategies, attitudes and behaviours, interpreter and teacher preparedness, Motivational strategies, Roles and responsibilities and government intervention*. The data analysis followed a chain of evidence from different sources combined together to give a holistic interpretation of the phenomena under investigation.

4.1 Background information

As already indicated in chapter three, the study involved 4 sign language interpreters, 2 Teachers, 2 Children with Hearing Impairment, 2 Hearing Children. The working experience of the sign language interpreters varied between 2 to 6 years, while that of the teaching staff identified varied between 5 to 10 years respectively. The teachers constituted the secondary informants since they worked with SLI for quite a long time. The teachers used in the study were not trained as special needs educators and did not have adequate sign language communication skills to teach CWHI in the School. In order to maintain uniformity, findings from the SLI as main informants are presented first since they form the main focus of the study. Pseudo names were considered for data presentation such as SLI: 1, SLI: 2, SLI: 3 ...and so on. This was

done to mask the identity of informants and to maintain an ethical scrutiny of their responses, as objective as possible.

4.2 Thematic Development of Categories & Sub-categories

Data analysis consists of examining, categorizing, tabulating, testing or otherwise recombining both qualitative and quantitative evidence to address the initial proposition of a study (Yin, 2003: pg. 109). This was considered during the initial planning phase of my analysis to aid the discussions of the findings. I have also used the pattern matching logic technique because the pattern logic compares an empirically based pattern with a predicted one because if the patterns coincide, the results can help the case study to strengthen its initial validity (Yin, 2003: pg.116). In data presentation, I have used both reflective and analytical reporting to accommodate both the literally and self conventional organization of the data addressed. The responses from the informants are presented according to the identified categories and sub-categories, followed by brief comments. Information about school B is presented in table 4.1 on the next page

Table 4.1: Shows the Salient Features about School B identified for the main Study

Demographic Information	Programmes, Staffing & enrolment data
<ul style="list-style-type: none"> • Located in a semi-urban area • Approximately 250 kilometres from the capital city • Government aided and boarding school • Has a computer laboratory, digital satellite television, a radio & generator • Staff and CWHIs come from different regions/ neighbouring countries 	<ul style="list-style-type: none"> • Employs 8 Sign Language Interpreters (3 female and 5 male) • Has 65 teaching staff. None of them is trained in special needs education • SLI get remuneration from the Parents and Teachers Association (PTA) fund • Enrolment stands at 1,000 to 1,100 • CWHI range between 4 – 6 per class

Comments on Table 4.1 above

Evidence from table 4.1 above shows that there is a marked difference in terms of human resources in the School. The number of Sign Language Interpreters falls far below the number of the Teaching staff to counter the challenging demands of Children with Hearing Impairment in all School activities. Sign Language Interpreters have a huge burden to deliver services to Children with hearing impairment enrolled in different classes which are divided into streams A, B, and C. My informal interview with the Deputy Director of studies helped obtain information in table 4.1. It indicates likelihood that the contribution from the Ministry of Education and Sports is not directed towards supporting the services of SLI, since the interpreters are not necessarily regarded as teachers according to the government educational policy. Low motivation therefore jeopardizes their work in this regard.

Evidence of no trained grade five teachers in the field of Special Needs Education, suggests that the teachers are not fluent users of sign language and therefore have limited sign language communication skills with the CWHI. This suggests an obligation for SLI to work under stressful and challenging conditions in a multi-cultural and multi-lingual inclusive learning environment studied. Findings from table 4.1 further show that SLI faced a huge burden to offer interpretation services to a cross section of hearing and Deaf Children who came from different geographical regions coupled with different cultural and educational backgrounds. This also creates a challenge to develop positive relationships and feedback between this clientele.

4.3 Factors Investigated

The following factors were investigated in an attempt to answer the study problem as told by the informants themselves through informal and formal interviews and observation methods. Findings from the key informants are combined with that obtained from Sign Language Interpreters and presented under the following categories and sub-category themes below;

4.4 Educational Backgrounds

Educational backgrounds were looked at in terms of informal and formal education. Informal education in this case meant how the interpreters' knowledge and skills influenced their work, considering their different educational levels. Formal education was referred to as the training which SLIs acquired at University. Although formal and informal education was considered one of the major challenges to the work of SLI, findings presented about their educational backgrounds, showed divergent views (positive & negative) regarding to their performance and competence. For example SLI4 said that he had learnt basic sign language through his daily interactions with the Deaf people in School B. Study assessments from all

interviews showed that out of the four interpreters involved in the study, only two of them had professional training at University. However, despite their training, observations indicated that the two interpreters still faced challenges when signing or voicing concepts during classroom activities. Their competence and the teachers teaching approaches were contributing factors. Compared to the two interpreters who also doubled as grade three teachers, SLI 4 had trained as a grade five Secondary School teacher and he held a certificate in sign language interpreting. Although he had studied literature during his education, he still faced tremendous challenges in language fluency when it came to voicing. SLI2 also informed me that he too faced a challenge when it came to signing technical terms in class because his educational background in sign language was through workshops. Being a teacher in the Regional Primary School for the Deaf, just a few meters away from School B where the main study was carried out was also an added advantage to his career.

The informants explained some coping strategies which they applied to overcome some of the challenges experienced above. SLI revealed that some of them had opted to go for further studies. For example, SLI 4 who trained as a grade five teacher was preparing to re-sit for his advanced level examination in School B, because he needed to attain a degree to access the government pay roll to get better pay as a graduate teacher alongside interpreting. SLI 2 also informed me that he had enrolled for an external Diploma course in Special Needs Education at Kyambogo University. The Deputy Director of studies informed me that the Uganda national association of the Deaf (UNAD) had plans to conduct sign language training sessions in the School for all the teaching staff and practicing interpreters to learn basic signs. However, by the time of data collection, this had not taken place. The assumption that economics could be a stumbling block could not be ruled out (Johnsen, 2003).

4.5 Communication strategies

Communication strategies meant how the sign language interpreters were sending and receiving information/messages and passed on to the Children with Hearing

Impairment and their hearing peers during indoor and outdoor activities in the School. I needed to find out how this was considered as a challenge in their work. However, communication in this presentation and analysis was looked at in two ways, i.e. verbal and non-verbal communication.

4.6 Verbal Communication

By verbal communication, it meant how the SLI were able to hear and respond to what was being uttered either through sign language or by voiced utterances. My interest here was to find out how the SLI perceived verbal utterances from the Teachers and other peers and pass on to the Children with Hearing Impairment and vice versa. My interview with SLI 1 showed that she had faced a challenge to grasp timely information from fast speaking teachers. She said that in most cases she faced negative reactions from the teachers, for example when she tried to raise her hand to voice the signed responses from the Deaf Child, other teachers could not give the interpreter chance to say what the Deaf Children wished to say. She told me that some teachers would say that; *“later on the interpreter will help them...”*

According to SLI 1, she said that it was the responsibility of the teachers to answer students' reactions through the interpreter, not the other way round. In addition, SLI 3 also said that most of the Deaf children were slow learners and some times the teachers spoke very fast and often forgot the perception levels of CWHI and the interpreter. His main concern here was that it was difficult to match his voicing level to that of the fast speaking teachers during lessons which involved a lot of explanations and pardons. He mentioned that he had to spend extra time after class hours to explain to the Children what had happened during the previous lesson(s) and yet he was to get ready to enter and interpret for the next lesson. By explaining, he considered it his coping strategy. He emphasized by saying that;

“...at the end of the assignment when the teacher pauses questions, I receive the questions and give to the deaf students but some times the students can easily complain that I give them hard questions...I try to explain to them that those are the very questions that were given to the hearing students since they shared the same lesson so this brings misunderstanding between us the interpreters and the deaf”

Despite some positive remarks, these kinds of negative expressions noted above were regarded as indications of the challenges interpreters' faced that went unnoticed during their work in the school. Information from SLI indicated that they received little support from a cross section of some teachers who did not know how to communicate in sign language.

4.7 Non-verbal Communication

Non-verbal communication in this case meant communication by use of signs, gestures, facial expressions and body movements with out the element of voicing. Prime among the challenging aspects identified in non-verbal communication during indoor instructions, was the fact that some Teachers used hard terminologies which were challenging for the interpreters to interpret into signs for the Deaf children to comprehend. The responses given by SLI 2 also indicated that he always faced challenges when it came to interpret in lessons like Literature in English because he had not learnt specific signs associated to that subject. SLI 3 also noted that it was challenging for him to interpret scientific vocabulary in science subject like Chemistry and Biology. Another informant mentioned that it was challenging to integrate and use all the signs from children since they came from different regions and from the neighbouring countries like Kenya and Tanzania. For example, SLI 2 said;

“...and when they come together, a student from Kenya might understand in a different way and if not, he can give me the sign to use but when I use it the Ugandan students will also say NO! That is not the correct sign so it brings a big debate to choose which sign to use at that very time which wastes time”

The above response indicated a big challenge in terms of language use and its applicability in a multilingual and multicultural setting like in this particular case. This poses a highly susceptible negative public criticism since interpreters often carried the blame of poor performance exhibited by the CWHIs. However, this could not necessary be treated so since the interpreters are not totally 100% perfect to duplicate the intentions of the teachers. Instead sign language interpreters should be encouraged to seek guidance from deaf children themselves for appropriate signs to use. This follows what SLI 2 said in this response that this often developed a shift in attitude by Deaf children and the hearing peers which makes interpreters get demoralized during their work in an inclusive setting such as this one.

4.8 Attitudes and Behavioral Relationships

Attitudes and behaviours in this case meant opinions expressed by individuals towards one another. Attitude was looked at in two ways that is; attitudes during indoor and outdoor interpreting assignments in the School. Although some informants expressed attitudes negatively, others expressed attitudes positively. My interest here was to find out how that influenced their work in the School. Below is an explanation of what the interpreters said in different paradigms.

4.9 Attitudes and Behaviors during Indoor Interpreting Assignments

These were feelings and behaviours expressed in the class towards the work of Sign Language Interpreters during their work inside the classroom. Interview with all the SLI indicated that it was challenging to maintain a professional distance with some teachers in class. For example, uncompromising relationships existed between the students teachers' who were posted in the School to do their School practices which was some times was regarded negatively by the interpreters. Interpreters alleged that

most of these teachers could not handle communication in class appropriately well, when SLI 1 said that;

“Some times these teachers are so fast in class that when you try to pardon them some do not pardon and others even try to under look other Deaf children. When I raise my hand to assist them or when the Deaf children raise their hands the teachers just ignore them that that is a waste of time, things of that kind”

The above expression indicates a lack of positive relationship existing between the interpreters and the teachers. This could probably be presented as Teachers’ lack of knowledge and skills about Sign Language and Interpreter Code of ethics. I also noted that it was always challenging to convince the hearing Children in class to acknowledge the disability of Deaf Children and allow them sit in front of the class. For example, SLI said that at one time the furniture was not enough, Hearing Children rushed in class and took up all the front seats and as a result these children were left to sit in the back rows where they could not easily see the signs and facial expressions from the interpreter and the teacher. When the interpreter requested the hearing Children to vacate the seats for the Deaf Children, Hearing Children often resisted since occupying seats in the class was based on a first come, first serve basis. This challenge is related to my sub-question 2, in the research sub-questions in section 1.10, in chapter one. Attitudes and behaviours were also reported to have a negative influence on the work of sign language Interpreters.

SLI 2 said that it was challenging for him to work with a large number of CWHIs and hearing Children in the same class. He said that he had seven Deaf Children in his class stream and whenever the teacher was teaching, some CWHI often showed less attention to his interpreted information. The Children could simply turn away and resort to doing other minor distracting things while the interpreter had to continue signing which was tiresome. This argument could be coupled with other factors that lead such Children to exhibit such behaviours in class; the informant did not dwell into details. However, this presentation is associated to the negative comments made by some deaf children I had earlier interacted on the school compound about some of their interpreters and the class room Teachers. For example this could have been

because of a boring lesson, bad lesson time, and unpleasant interpreter or because some teachers were always wearing unpleasant faces since deaf children mainly rely on visual perception. All these elements could have been overlooked by the teachers. This is a common phenomenon in some Schools in Uganda.

4.10 Attitudes and Behaviors during outdoor Interpreting Assignments

These were feelings expressed about the sign language interpreters outside the confines of the classroom. My interest in this sub-category was to find out how this was regarded as a challenge in the empery. Interview with SLI 2 indicated that he always felt withdrawn when the other teachers could meet and start to discuss about the general students' performance during staff meetings or when they converged in the staff room during break time. He cited an example when the deaf children performed poorly and the other teachers began pointing negative comments on them (Interpreters) that they had not interpreted the right information to the Deaf Children in class. SLI 4 also informed me that in most cases some of the staff considered them as "*people with no jobs!*" However, my interpretation of this was that in settings like this, some teachers may want to shield their weaknesses from the school administration, since the school administration seemed strict on performance; although in some instances it may be true to say the reverse.

Although SLI 2 mentioned that the School was treating them like other teachers by giving them other additional responsibilities like when the head teacher gave her a responsibility of being a house mistress. She recognized that as motivating as she felt part and parcel of the School staff. However, SLI 4 argued that such extra work load like marking exercise books, delegating them to keep order in the dining hall or giving notes to the students in the class, was quite unusual and out side their professional mandate. However, I presented this as an identity crisis and role conflict which infringes on the professional ethics and work of SLI due to lack of awareness by both parties.

4.11 Motivational Strategies

Motivation means what drives one to perform a given task. In this case motivation meant the kind of encouragement that drove interpreters to perform their indoor and outdoor interpreting tasks in the inclusive Secondary School environment.

Motivation was viewed in two ways, i.e. intrinsic or internal motivation and extrinsic or external motivation. My aim here was to find out how motivation was regarded as a hindrance to their interpreting tasks in the School and how that influenced their work. The evaluations were made with reference to the kinds of motivation coming from within the SLI themselves and from the School.

4.12 Intrinsic or internal motivation

Questions asked needed interpreters to tell their feelings about working in an inclusive environment and how that influenced their performance. Although informants expressed negative and positive feelings about motivation, all the four informants expressed willingness to do their work with enthusiasm. They supported this argument basing on the fact that Children with hearing impairment in the School always passed their final examinations and joined University. One informant expressed that;

“...teachers encourage us and we feel proud for the work we deliver to the deaf students. For example when I interpreted in senior five in 2005 they all passed and no one failed”

This kind of expression sounded a good motivational strategy used by the interpreters to overcome challenging situations during their work in such a complex learning environment. Although most SLIs noted that the School administration treated them like other teachers, for example when the teachers delegated them to maintain order in the dining hall, silencing naughty students in class and marking exercise books, they reasoned that in that way, they were overworked since they had to work even during weekends and public holidays helping Children with hearing impairment understand what they had missed in class from fast speaking teachers.

4.13 Extrinsic or External Motivation

Extrinsic or external motivation implied influences coming from outside the School and the community and how this was viewed as a challenge to the performance of SLI in their work in the School. Despite the little remuneration offered by the school, amounting to 100,000 (One hundred thousand Uganda shillings), most of them revealed that little attention was coming from the central government in monetary terms to cater for their daily transport and other basic living needs. SLI 4 said that government was so reluctant to recruit interpreters who had teaching qualifications into the government pay roll. This view was also shared by the deputy director of studies when he said that the School was implementing government policies from the Ministry of Education and Sports without any budget to cater for interpreters. He noted that the parents and teachers' association (PTA) contributed to their welfare. This view can be compared to the study by Johnsen (2001), when she mentioned that economics is one of the stumbling blocks towards the implementation of inclusive education. Johnsen clearly mentioned that some countries had indeed termed it as "*the law above the laws*" Uganda where corruption and misallocation of educational resources looms, is no exception.

This observation also highlighted the fact why School B of study failed to employ more Sign Language Interpreters and thus leaves interpreters besides being overworked in classes of competing voices and socio-cultural and educational backgrounds. Classes in the school were divided into streams; A, B, and C. In this, case all informants requested government to recruit and allocate more funds to help the School facilitate them. This was seen as a possible coping strategy to delimitate some of the challenges identified above. Another negative factor was identified when SLI 2 reported that she and her colleagues had experienced negative criticisms from some teachers about the poor performance by some CWHI in the School. She lamented that some of the teachers often mentioned the weaknesses of SLI even before the other staff in the School compound. This lack of confidentiality degraded and demoralized their efforts in most cases. Most SLIs mentioned that they were

given less time to prepare for the next lessons, while other teachers were reluctant to lend them teaching text books to revise before the next lessons. Information gathered from most of the informants revealed that most of the teachers teaching difficult subjects cited did not allocate extra time to work together with the SLI to help Children with Hearing Impairment after classes.

Most informants said they were burdened to do extra work after classes without the teachers clarifying some concepts in their presence. They mentioned that by doing it by themselves made some Children doubt their input since some of the SLIs were not trained Teachers themselves. The reason of poor remuneration could also apply to explain laxity among the teachers. Data from most interpreters showed that most of them could be withdrawn from their work in the class to attend to other urgent assignments some times with consultation. For example, SLI 2 said that at one time he left interpreting in one class to go and interpret in the bursar's office because the bursar could not communicate with one of the parents and his deaf child who had a fees problem, this interpreter said that;

“because every one was occupied in class, and there was no interpreter who was free at that time so I was called out and my students quarrelled but I had to help this one who was going in for an examination which was very important”

Although the deputy Director of studies had earlier informed me that a programme was in place to train all the staff in basic sign language, it was evident from the above expression that the programme was not properly being implemented in the School. To avoid such situations, my interview with SLI 2 suggested that emphasis should be put to train all the teaching in Sign Language and non-teaching staff during holidays since they were busy during the school term. This was one of the coping strategies to the challenge of communication strategies.

4.14 Government Policies and implementation frame works

Concerning the various documents consulted, like the new policy on Universal Secondary School Education (USSE, 2006), the government Constitution (1995), the government White Paper on Education (1992) and the Teaching service commission reports and others, most of the informants interviewed showed little knowledge of these documents, their content and their implementation frameworks. This was seen as a challenge in an attempt to use them as advocacy tools to safe guard the services of support staff like the SLIs. The School administration was left with no option but to lean on the directives from the central government line Ministry of Education and Sports in implementing these policies. For example, there was a suggestion by all informants that Sign Language Interpreters should be motivated and treated like other civil servants in the education service commission since they too served in a government-aided institution. However, most of them lacked such awareness on the right channels to voice out their concerns, let alone their varied educational stands.

I also realised that most of the associations that worked with persons with disabilities did not send their publications to the school concerning the use of Sign Language Interpreters. If they did, they were not consulted by stake holders since they too know little about Deafness and disability concerns in general. If these documents were sent to the School, it would help the school to know how to treat the interpreters. They would also help interpreters who have not undergone formal training at university. I recorded this evidence in the School because the researcher did not see any regular classroom teachers trained in special needs education, except the SLIs. Implementation of these policies was left in the hands of a few officials from the central government like the inspectors and commissioners who often visited this School once in a while. This was seen as a challenge because it left the concerns of Sign Language Interpreters unattended to in this regard.

4.15 Interpreter Preparation and Readiness to work

This category was identified from most of the interviews with the informants and it meant how the sign language interpreters had the possibility to prepare and get ready to work in collaboration with the classroom teachers. I was interested to find out how this was looked at as a challenge to their work in the School. However, my presentation of preparation in this case was looked at in two parameters, that is; preparation inside the classroom and preparation outside the classroom. Despite the challenges experienced, preparation was also viewed by other informants positively.

4.16 Preparation and Readiness to work during Classroom Activities

This meant how the SLI got ready to perform interpreting tasks inside the classroom. First and foremost I looked at classroom organization. Here, SLI 1 said that she always faced challenges when it came to positioning herself and the CWHI in class so that they could clearly see the teachers' facial expressions and her signing and vice versa. In these observations, I also noted that classrooms had limited furniture. As a result, the hearing Children always rushed in class and occupied all the front seats leaving the CWHI to occupy the behind seats. The problem here was that the CWHI could not see signs from the interpreter and to respond to the teachers properly. Whenever the interpreter requested the hearing Children to give space, they always resisted, forgetting the kind of disability the deaf children had since sitting in class was on a first come first serve basis.

This observation is in line with my question on the interview guide stated as, *what challenges do you face inside the classroom during your work?* SLI 2 also said that they faced a big challenge because there was no co-interpreting being done in class due to the limited numbers of interpreters. This meant that most interpreters worked alone with out any help from the teachers and since the teachers themselves did not have basic sign language skills, this was inevitable. Interviews with SLI 1, 2, 3, &4

pointed out that there were only 8 interpreters working in all the six classes divided into streams A, B, and C with many Deaf and hearing students. With this small number, chances of proper preparation were therefore very slim.

All main informants interviewed reported that they could not have ample time to prepare for the next lessons since some teachers were not always in the compound after official school time. They also reported that in most cases teachers entered in the class with them at once with out any preparation on their side. Another observation was that the interpreters lacked the initiative to consult the Deaf children on the difficult terms prior to the lessons. For example SLI 2 said that he had had problems interpreting during Science lessons like Biology and Chemistry. My prompts on this showed his inability and personal drive to consult the teachers and deaf children on the signs to use indicated little Endeavour in him on this aspect. He alleged that some materials like text books were inadequate in the School library and that the teachers and the librarian were reluctant to lend them out. However, I did not verify this with the library.

4.17 Preparation and Readiness to work outside Classroom Activities

These were preparations done outside the confines of the classroom. Most interpreters interviewed mentioned that in most cases, they were called in to interpret in abrupt situations like when officials from the ministry or any ordinary visitors, and parent(s) of CWHI came to the School. In these cases they had no option but were obliged to interpret in difficult situations with out consultations with colleagues who may be conversant in voicing or signing in such different situations. However, SLI 1 mentioned that she always prepared herself when it came to interpreting out side the School. A case of reference was during preparations for world AIDs day celebrations at the district headquarter where deaf children were to present a drama on HIV/AIDs. She demanded deaf children to brief her on the theme of the drama.

This kind of observation was a sign of positive coping strategy on the part of interpreters. SLI 2 said that they faced a challenge in preparing the students ready to do an examination. This concern was noted when the CWHI did not perform well in one of the English exercises given in class. SLI mentioned that interpreters were obliged to teach weak Children outside the class time table during their free time even though some of them were not trained as secondary school teachers. However, this observation is shared by Schick (2004), when he emphasized that the interpreters are not 100% perfect and can not duplicate all the intentions from the teachers in class. As already presented above, many factors have been identified as challenges to the work of Sign Language Interpreters in an inclusive School environment. These factors were seen to emanate from the interpreters themselves, while others were external influences.

However, all the factors were presented in a reflective and analytical perspective as far as the instruments used were concerned, varied from informants according to the working situations the study focused. The findings may not be conclusive and the readers are argued to gauge the presentation in different angles and do further research in the areas they deem worthy in promoting education of Children with hearing impairment. A discussion of these presentations is therefore presented in the next chapter.

5. Discussions, Conclusion and Recommendations

This chapter presents a brief discussion of the summary of the main findings that identified the key factors deemed challenging and influenced the performance of Sign Language Interpreters working with Children with Hearing Impairment in an inclusive environment. The study was carried out in one secondary High School in Uganda which practices the principle of inclusive education. The factors identified were classified and discussed as challenges that demand further attention from all stake holders involved in education of children with hearing impairment and Sign Language Interpreters. The themes discussed below followed a categorisation and sub-category procedure identified from the data. These chapter further attempts to give recommendations and a summary and my own incite on the topic studied in the theoretical Chapters.

5.1 Challenges involved in Communication

This study has revealed that Sign Language Interpreters and classroom Teachers have comparable communication challenges in their attempt to help Children with hearing impairment learn better in an inclusive school environment. Sign language interpreters have had variations in communication skills as a result of their educational backgrounds knowledge and skills in sign language and Deaf culture. The fact that the teachers' also did not have Sign Language skills themselves was not only regarded a hindrance to effective communication between them and the interpreters but it also not allowed Interpreters to realise their full potentials in performing their work and belong in such a setting. When informants were asked to comment about their educational backgrounds and how that influenced their work, communication proved a central point to the problem of study. This reflects the fact that teachers and SLI seemed to have challenges in delivering interpreted information to Deaf children. This finding is in line with the theory of communication advanced

by Bloom and Lahey (1997). Bloom et al. emphasised the elements of language as **Form, Content** and its **Use**. The findings show likelihood that both the Sign Language Interpreters and the teachers provided education to Children with Hearing Impairment in an inclusive setting in part. This findings as well contrast the theory of communication and language as advanced by Bloom and Lahey et al., (1978). In their theory of communication, Bloom and Lahey considered communication as a crucial element in social life in society. They argued that; when we are able to communicate appropriately well with other people, we are able to satisfy our physical and psychological needs, direct our actions and actions of other people to ensure a conducive learning environment. In other words this meant that CWHI, need to understand and be understood about what goes on in the world around them, in this case in an inclusive learning environment. But since the interpreters had various challenges, this could be overshadowed.

However, the issue of communication challenges can also be reflected to the findings by Schick and Williams (1999) as discussed in chapter two. They carried out a study on Deaf students in American K-2 schools and concluded that about 56% of the learners interviewed had difficulties to grasp interpreted information from highly qualified interpreters because of the technicalities involved in perceiving verbal messages from teachers of different qualifications and their methods of message delivery in class.

5.2 Implementing Inclusive Education with little Policy support

The government policy to promote Secondary School Education for Children with disabilities is clearly stipulated on the government White Paper on Education (1992), government constitution, (1995). However, little has been done to train special needs education teachers and sign language interpreters to support in this course at post-primary level. These policies have only remained on paper and do not provide clear guidelines that can be adapted by policy implementers in inclusive Schools. If this is

done, it is mainly realised in a few urban Schools where close monitoring mechanisms are put in place. Reading through these policies, I realised that they did not clearly point out how support staff like Sign Language Interpreters could be remunerated and recruited in the school staff structure. These kinds of assumptions tended to overshadow the slogan “*Education for All*” which was a known concept country wide and as advocated by UNESCO (1994). In this sense, these policies have created a disparity between the private-owned and government-aided institutions mandated to train special needs educators and Sign Language Interpreters; it is an expensive venture that limits the numbers of interested people to enrol in government-aided universities, where cost-sharing is equally so expensive.

Although this study focused on interpreters working in an inclusive secondary high School, I also did a pilot study in University A, which practiced the principle of inclusion/integration in a similar setting. The findings obtained in this pilot study showed that Sign Language Interpreters faced similar challenges like those experienced in school B where the main study was conducted; moreover this was just a representative sample. As indicated in chapter two, Johnsen (2001; pg. 266) outlined that economics as one of the stumbling blocks in an attempt to implement the policy of inclusive education. Johnsen (2001) rightly argues that economics has been nicknamed by most countries as “*the law above laws*”. This kind of expression follows what the deputy Director of studies asserted in School B when he said that, they had no budgetary allocations from the Ministry of Education and Sports to cater for the services of Sign Language Interpreters. However, I interpreted this as a result of poor planning, corruption and laxity on the part of government education departments to implement government policies. I also came to understand that some of my informants had qualified as grade five teachers and legible for recruited and being paid by the government, however, this was not practically done. Instead all interpreters interviewed were paid from the Parents and Teachers Association (PTA) fund. This was challenging because I later thought that probably it was because the interpreters belonged in two professions. On the other hand, the government needed to recruit and included them in the pay roll since they were professionally trained

civil servants. However, since the policies were not clear on recruitment it remained challenging even to the School. This could be reason why most sign language interpreters felt demoralised in their work. The question then is what is the role of government in promoting inclusive education in Uganda? The inclusion of specific legislations about education of children with disabilities suggests that it is an obligation for policy implementers to go down to the grass root and explain these obligations and implementation strategies to stake holders since it is a constitutional provision. In the two documents, The Uganda government White Paper on Education (1992), the constitution (1995) they both state that,

“The state shall promote the development of Sign Language... (Pg. 8)”

The above legal provision meant that it was an obligation for all educationists to implement them to cater for the educational needs of Children with Hearing Impairment, to achieve education for all. I am also aware that such issues involving special needs education in Uganda are mostly handled by government-aided institutions that train special needs educators. However, such responsibilities should be extended to private institutions in the field of education so that more service providers like interpreters are trained. The fact that government does not train a sizable number of Sign Language Interpreters at university is not an immediate option to alleviate the challenges identified in the study. Inclusive education and its implementation strategies is not a new phenomena, however, more sensitization needs to be done at different policy and implementation levels in the country and educational institutions.

Uganda being a young democracy is still caged in transforming her socio-economic and politics structures. There is therefore need to spread the advocacy publicly and responsibly by the politicians in their constituencies in the country since it is a constitutional provision. Needs assessment could to be carried out in all the institutions mandated to spear head special needs education in the education sector. Proper monitoring mechanisms need to be put in place so to identify loopholes that

hinder provision of education to these children through assistive means, not only in inclusive schools but in mainstream schools as well in form of networking.

5.3 Understanding Professional Roles and Motivational Strategies

Little about their professional roles and responsibilities surrounds both the work of Sign Language Interpreters and the teachers in the selected School of study. I realised that the interpreters and the teachers had no clear distinction of their professional roles and ethics. Although the School had employed different motivational strategies to inspire the interpreters, most teachers and administrators seemed unaware of the existing code of ethics in the profession. For example, assigning extra responsibilities to the interpreters in this respect, where teachers were not trained as special needs educators, affects relationships with the Deaf Children and the teachers as already discussed in the previous chapter four above. Considering the fact that in this school had many staff that needed promotions and rewards based on qualifications, I saw this as challenging on the side of interpreters because they were a completely different section all together. This could be reason why interpreters alleged that they were labelled as *“people with no jobs”* by some staff in the school.

The World Federation for the Deaf (1993) emphasises the need interpreters to adhere to professional codes of ethics (see section 2.5). It is therefore an obligation for the School to respect and maintain a professional gap between the interpreters and the teachers since their responsibilities differ in the school. There is enough evidence to indicate that their is need to incorporate the two sets of professionals in the government pay roll, even though there payments would differ, this would make them feel part and parcel of the education sector. By recognising their contribution in this way, it adds value and motivates them to even perform their work better amidst the challenges discussed above.

5.4 Challenges involving Attitudes and Behaviours

The current working conditions for SLI in inclusive setting as discussed above calls for concerted efforts and change of attitudes and behaviours in all parties fronting inclusion. Skjørten (1996), UNESCO (1994) and Bitters, (1976), suggested that schools in agreement with the international conventions and the principle of inclusion should strive to make the schools adjust the learning environment for Children with disabilities not the other way round. Schools should be innovative and find appropriate means to provide assistive services that enhance learning and inclusion in educational activities in the best possible way for CWHI. It may not be easy to tell in this study why interpreters were labelled as *“people with no jobs”* or *“...later on deaf children will be helped by their interpreters...” etc.* But the fact of attitude still remains a big challenge as was alleged by some informants. Responding to the question about the additional skills that Sign Language Interpreters have, I assumed that such labelling and name calling was because government lacked the will and commitment to recruit and include interpreters as members of staff, especially those who doubled as teachers. Following what one informant suggested that there was need to have a resource room where Deaf Children would work with the interpreters to discuss what they missed in class.

This kind of isolation meant a negative feedback which would isolate interpreters and Deaf Children away from the rest of the School contrary to the guiding principles on inclusion. I am aware that sign language can be distractive since it is a visual language but teachers are supposed to work along side the support staff to help such children with disabilities like others with such inconvenience. Considering that Sign language is a quiet mode of communication, there was no genuine reason to isolate Deaf people from sharing the same library with the hearing peers as alleged by this specific informant. We also have to remember as discussed in chapter two about the levels of hearing. The fact that some Children interviewed became Deaf at different stages may have contributed to the challenges involving attitudes and relationships.

Most of the deaf children in the school came from different regions while others came from neighbouring countries with different socio-cultural backgrounds altogether.

5.5 Conclusion

The thesis emphasizes the need to understand better the complex personal and functional work of sign language interpreters, if educational interpreting – and interpreted education – is to be respected and developed. The research was sensitive to the fact that findings of the sort make an already difficult situation seem even more so if not handled properly. Ultimately, however, if some of the factors that have previously been assumed important turn out not to be, it could be possible to significantly improve the effectiveness of educational interpreting without overwhelming the interpreter. Convincing evidence is uncovered that point to the fact that children with hearing impairment do not comprehend as much as their hearing peers do in the classroom, even when provided with highly-qualified Sign Language Interpreter(s) in settings like this because of the educational, and socio-cultural diversities. Several reviews and analyses provided in the theoretical chapters have addressed the issue of whether such findings are specific to sign language interpreting or indicative of more general teaching-learning challenges in educating Children with Hearing Impairment through sign language interpreters. The answer to this doubt still remains to be discovered by future researchers in the area of communication and sign language interpreting.

Much of the research has been conducted with Sign Language Interpreters working in inclusive high School, however, more needs to be extended to related settings.

Although such differences have not been demonstrated in studies involving educational interpreting such as this particular one, the informants involved in the research represent a relatively limited range of participants. Findings show that Sign language interpreters who learned to communicate in sign language earlier performed better than the new entrants joining direct after University. In my study, I did not notice deaf-blind children in the School, but this can often go along with perception

and as it appears, there is no any rigorous study of comprehension and Deaf-blind impairment in inclusive classroom settings, such investigations are clearly important and would be very informative in several respects. If the observed challenges are specific to sign language interpreting, educators should work closely with them to alter pedagogic approaches and compensate in areas of documented difficulty as evidenced by lack of adequate interpreter preparation, as presented in my analysis in Chapter four. However, if the comprehension challenges prove a product of general language influences, it's my hope that interpreters and other service providers in inclusive settings recognize this and hopefully address it all together. Closely related to a general language comprehension barrier to interpreting success is the possibility that Children with Hearing Impairments' conceptual knowledge, general knowledge and information processing strategies differ from those of hearing students in ways that create barriers to Educational Access and Outcomes (Marschark, 2003; Marschark, Convertino et al., 2004; McEvoy et al., 1999). There were a variety of intuitively appealing arguments for direct instruction for deaf students through interpreting.

One obvious explanation in my findings shows that interpreters simply can never really duplicate the knowledge and nuances that a good teacher brings to a classroom setting by virtue of his/her experience and knowledge. In other words, interpreters are not 100% hence can not duplicate its source perfectly well in inclusive settings. This is because most teachers are not aware of the aspects between verbal non verbal communications which could assist them to modify instructional strategies accordingly. Regardless of the extent to which any of the preceding alternatives contribute to barriers to the work of SLI, the lack of research into various aspects in this field and its outcomes surely is a significant factor in the phenomena. Much more research is needed in the area of Interpreting and Inclusion. This requires the support and participation of all stakeholders in deaf education and the interpreting enterprise. This is because of the relative youth of the interpreting profession and the ambiguous role of interpreters. There has yet to be any concerted attempt to

incorporate the relevant psychological and educational research into interpreted education.

5.6 Recommendations for Future Improvements

From the study findings, many factors have been identified that influenced the services provided by sign language interpreters working for CWHI in an inclusive secondary school setting studied in Uganda. However, it may not be possible to address all these factors in only this specific study; I therefore wish to put down the following suggestions for future reference;

Attitude Change

Attitudes have an influence on a person's performance in a multi-cultural and multi-lingual society where people need to accommodate each other on daily interaction. It is therefore important for professionals and other stakeholders to recognise these differences in their places of work. In this case, attitudes can positively be redirected by;

- Increasing opportunities for Sign Language Interpreters, teachers and the Children with hearing impairment to learn and treat each other equally.
- Allow Sign Language Interpreters to express their own opinions about their work, as objectively as possible in order to maintain progressive communication and dialogue.
- Discuss and consider ethics and any underlying challenges that SLI may experience so that workable remedies can be thought collectively.
- Maintain confidentiality and positive criticism so that those who do not understand how to communicate in a specific language feel part and parcel of the society, in this case in an inclusive school.

Communication Strategies

In order to fully utilise the efforts of sign language interpreters and appreciate their input towards education of Children with Hearing Impairment, there is need to promote and develop Sign Language communication by all educationists. Given that Sign Language is legally recognised in the Uganda government constitution (1995), it is paramount for School management committees to encourage teachers and non-teaching staff to learn the language in order to communication with these children, with out necessary requiring the assistance of Sign Language Interpreters. Such an initiative can help delimitate communication challenges identified in this study. Such trends will require a complete turnover of attitudes, negative acceptance and sensitisation of the teaching staff. Although communication was identified as one of the most important challenge to the work of SLIs, it is also evident from the code of ethics as discussed in chapter two, section 2.5, that interpreter were expected to use the preferred language, and accept assignments with discrete with regard to their skills and the setting involved. However, there was an indication that the code of ethics was not properly followed by all the Interpreters and other staff in the School. This interpretation fits in professional laxity which may have had a negative influence on the interpreters performance in such an inclusive setting studied. Considering the imbalance in their educational levels, this was inevitable.

Interpreter Professional Development

The study findings indicate a need to encourage Sign Language Interpreters to go for further studies in the area of interpreting. This can be done by encouraging them to enrol for in-service training programmes, attend local and international workshops and conferences about interpreting, to enrich their professional potentials. There is need for the teachers to show commitment as role models in the inclusive School. It is also important for the teachers to be prepared and accommodate children with hearing impairment in the same classes when interpreters are not readily available by

learning basic sign language skills. The following could be considered in the area of training;

- Knowledge of Sign Language Interpreting and code of ethics and practice
- Knowledge about Sign language and Deaf culture
- The role of Sign Language Interpreters working in inclusive settings
- Professionalism, Sign linguistics and its applicability in such settings

Teacher Training

In order to facilitate the work of the interpreters, there is need to promote grade five teachers training in the area of special needs education. With this knowledge, it calls for good preparation and consultations amongst the classroom Teachers and Interpreters during indoor and outdoor assignments in the School. Such training can cover classroom communication strategies, sitting arrangement, interpreter-teacher relationships, interpreting code of ethics. In addition to being trained on adapting the working environment, teachers need to be sensitised on change of attitudes towards Sign Language Interpreters with regard to their different professional backgrounds. Emphasise should be put on training pedagogic approaches to handle mixed classes to student teachers still in teacher training colleges. This basic knowledge should cut across all the pedagogic curricular in teacher training universities and colleges through out the country.

5.7 Suggestions for Future Studies

This study focused on the challenges faced by sign language interpreters working in one inclusive secondary high school in one region. Although the study has tried to reveal both intrinsic and extraneous factors that were deemed stumbling blocks towards successful provision of interpretation services in this particular setting, other

details may have not been fully exhausted in this particular study. The following areas are considered worthy putting more emphasis;

- Language and learning for Deaf Children
- Acquired hearing loss and special needs education in post-primary schools
- Deaf Culture
- Awareness raising on the interpreting profession and interpreter Code of ethics
- Teachers' care and communication strategies with Sign Language Interpreters in all school activities in the school
- School curriculum innovations.

The above aspects may not have been exhausted in relation to the problem studied; however, this is just a guide for readers to reflect on their respective individual contexts.

5.8 Reflective Notes

This particular study has opened and redirected my thoughts about inclusive education, more especially when the study discovered communication as one of the most important touchstones in mediated learning and realising education for all. This calls for an understanding of a common mode of communication between the teachers, Children with hearing impairment and others they work with. My exposure to research in a multilingual and multicultural community has widened my understanding regarding attitudes and individual relationships with persons who were regarded as "*different people*" in my society. In this particular case Children with Hearing Impairment. My personal involvement and interactions with stakeholders during data collection in the field made I understand the existing differences and similarities attributed to co-existence in such an inclusive setting. This particular study has added my zeal and zest to venture to do more research of this kind related

to Deafness, Language and Communication. These observations therefore serve linkages to new horizons to further my quest to learn more about Sign Language Interpreting in different parameters. The empirical and theoretical evidence and various methodology used in this particular study, have upgraded my knowledge and skills to work independently in doing similar research in special needs education in the near future. This was a base line study, I intend to carry out an evaluation of the research findings in the future if resources may allow.

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7. Appendices

Appendix I: Interview guide for Sign Language Interpreters in School B of the study

This interview guide aims at discussing with you the challenges faced by Sign Language Interpreters working with Children with hearing impairment in this school, your experience working in an inclusive learning environment, the coping strategies used to overcome such challenges and what you think the school and government should do to solve these challenges. The study is basically for my academic work which will also help the work of sign language interpreters working in Schools like yours.

I would kindly request you to allow me tape record the interview with you, which information I will keep confidential. I request you to feel free to terminate our conversation whenever the need arises. You are also free to listen to your taped voice and make so that you can any necessary amendments in end of the interview process.

1. BACKGROUND INFORMATION:

How long have you worked as a sign language interpreter in this school?

Can you tell me how you came to learn sign language?

What level of education have you attained?

Which classes do you interpret in the school?

Have you ever worked as a sign language interpreter before?

How do you value your work with deaf children in this school?

2. INFORMATION ABOUT YOUR WORK IN THE SCHOOL

How do you relate with the teaching and non-teaching staffs in the School?

What preparations do for your interpreting assignments in the school?

Which subject areas to do you interpret in class?

What support do you get from the teaching staff to facilitate your work inside and outside the classroom?

Which challenges do you face during indoor and outdoor interpreting assignments in the school?

What support do you get from the school administration to facilitate your work?

How do you feel working in an inclusive learning environment like this one?

Which other responsibilities do you have apart from sign language interpreting in the School?

How do the children with hearing impairment treat you and other peers in the School?

3. INFORMATION ABOUT COMMUNICATION

Can you please comment on the kind of communication between you and the children with hearing impairment in the school?

What kind of communication strategy do the teachers use in the School you work with?

What is the mode of communication used by the children with hearing impairment and their peers in the school?

Can you comment on your skills in voicing and signing during your work in the school?

Can you tell me more about co-interpreting with your colleagues in the school activities?

4. INFORMATION ABOUT THE COPING STRATEGIES

How do you cope with the challenges you face in your work in the school?

What support do you get from the school administration to facilitate your work?

What additional support do you get from the government Ministry of education to facilitate your work in the school?

5. RECOMMENDATIONS

In your own view, what do you suggest the school administration should do to facilitate effective interpretation services in the School?

Do you have any thing you wish to add on to our discussion today?

Thank you.

Appendix II: Interview guide for Classroom Teachers in School B of the study

This interview guide aims at discussing with you the challenges faced by Sign Language Interpreters working with you in an inclusive learning environment like this. The coping strategies used to overcome such challenges and what you think the school and government should do to solve these challenges. The study is basically for my academic work and may also serve to help sign language interpreters working in the School.

I would kindly request you to allow me tape record the interview with you, which information I will keep confidential. I request you to feel free to terminate our conversation when the need arises. You are also free to listen to your voice and make any necessary amendments in end of the interview process.

1. BACKGROUND INFORMATION

How long have you taught in this school?

Are you trained as a special needs education teacher?

How many sign language interpreters do you work with in the school?

Do you have children with hearing impairment in your class?

How do you communicate with the deaf children in the school generally?

In your own view, do you feel the school takes adequate care of all the services of sign language interpreters in the school?

2. INFORMATION ABOUT WORKING WITH THE SIGN LANGUAGE INTERPRETERS

How do you relate with the sign language interpreters in the school?

Can you comment on the relationship existing between the sign language interpreters and the children with hearing impairment in the school?

What kind of indoor and outdoor support do you give to sign language interpreters in their work?

Do the children understand well the information you teach through the sign language interpreters?

Can you comment on the relationship existing between the other teaching staff and the sign language interpreters in the school?

What other responsibilities do the sign language interpreters do apart from interpreting in the school?

What kind of support does the school give to facilitate the work of sign language interpreters in the school?

In your view are the interpreters' feelings about workings in an inclusive learning environment?

Which areas do you consider of great challenge to the work of sign language interpreters during indoor and outdoor assignments in the school?

How have these challenges affected the work of sign language interpreters in the school?

In which ways have the school and government tried to cope with the challenges faced by sign language interpreters?

What do you think the school management and government should do to facilitate effective work of sign language interpreters in the school?

Can you comment on the contribution of sign language interpreters to the education of children with hearing impairment in the school?

Do you have any thing you would like to add on to what we have discussed today?

Thank you

Appendix III: Interview guide for Children with Hearing Impairment in School B of the study

This interview guide aims at discussing with you the challenges faced by Sign Language Interpreters supporting your involvement during indoor and outdoor school activities, the coping strategies used to overcome such challenges and what you think the school and government should do to solve these challenges in order to facilitate effective learning through interpreters. The study is basically for my academic work which will also help the work of sign language interpreters supporting you in your education.

I would kindly request you to allow me record the signed interview with you using a Video Cam Coder, which information I will keep confidential. I request you to feel free to terminate our conversation whenever the need arises. You are also free to watch your views so that you can make necessary amendments in end of the interview process.

1. BACKGROUND INFORMATION

When did you join to study in this school?

How did you become deaf?

In which class do you study?

How did you come to learn how to communicate in sign language?

Do you have hearing or deaf parents?

Have you ever benefited from the services of a sign language interpreter?

How do you communicate with your family members at home?

Do you have hearing friends who know sign language in the school?

Do your teachers know how to communicate in sign language?

How do you communicate in class during lessons with out the interpreter?

How many sign language interpreters support you in the school activities?

How do you feel learning in an inclusive school environment like this one?

WORKING/RELATIONSHIP WITH THE INTERPRETERS AND STAFF

Do you understand what the teachers teach through sign language interpreters in class?

How do you relate with the teaching staff in all school activities?

What support do you offer to the sign language interpreters who support you in the school?

What support do the teachers give to the sign language interpreter(s) to facilitate their work after school time?

Can you comment on your relationship with the hearing children and interpreters during your involvement in indoor and outdoor activities in the school?

Do all your friends with hearing impairment communicate using the same signs language in the school?

Which areas do you consider most challenging to the work of sign language interpreters you work with?

INFORMATION ABOUT COPING STRATEGIES

How has the school supported the work of the sign language interpreters in the school?

Do you know of any additional support the interpreters receive from the government?

In your own opinion, how would you think the school should offer support to the work of sign language interpreters in the school?

Do you have any thing you would like to add related to the challenges faced by sign language interpreters in their work in this school?

Thank you.

Appendix IV: Letter of Introduction from Oslo University



**UNIVERSITY
OF OSLO**

Department of Special Needs Education

P.O.Box 1140, Blindern
N-0318 Oslo
NORWAY

Your ref:
Our ref: 13/06 BHJ/db
Contact person: Denese Brittain d.a.brittain@isp.uio.no

Visiting address:
Helga Eng's Building
3rd and 4th floor

Date: June 21, 2006

Telephone: + 47 22 85 80 59
Telefax: + 47 22 85 80 21

FACULTY OF EDUCATION

TO WHOM IT MAY CONCERN:

This is to certify that **OMUGUR, Julius Patrick**, date of birth 01.05.1973, is a full-time student pursuing a course of study at the Department of Special Needs Education at the University of Oslo, Norway, leading to the degree of Master of Philosophy in Special Needs Education (M. Phil. SNE).

This is a continuous two-year programme run on the "sandwich" principle, which involves periods of study and field work/research in both Norway and the home country. The student has concluded the initial 11-month period in Norway and will be returning to the home country in July 2006 to continue full-time studies/research until 1 January 2007 when s/he returns to Norway for the final part of the degree. The period of study will be completed at the end of May 2007.

The main responsibility for supervising the research, developmental work and thesis remains with the Department of Special Needs Education, University of Oslo, Norway. However, we would kindly request that the relevant authorities give the student the access required to the schools and educational establishments necessary in order to undertake field work and research. We would also be most grateful for any assistance that is afforded to the student which enables her/him to carry out this work, particularly the use of facilities such as access to telephone, fax, e-mail, computer services and libraries at the various educational establishments.

Yours sincerely

Associate Professor Berit Helene Johnsen (dr.scient.)
Academic Head of International Master's Programme
Department of Special Needs Education

Department of Special Needs Education
Faculty of Education
University of Oslo, Norway

Institutt for spesialpedagogikk
Det utdanningsvitenskapelige fakultet
Universitetet i Oslo
Norge

Appendix V: Permission letter to School B of the Study

Kyambogo University,
P.O Box1,
Kyambogo,
Kampala-Uganda

15th July 2006

The Head Master,
N H S,
P.O Box 4
Kumi.

Dear Sir/Madam,

Subject: Permission to Conduct A Research in Special Needs Education.

I have been working in the above University. However, I am currently on study leave for further studies on a master degree of Philosophy programme in special needs education in Oslo University, Norway. One of the requirements of this course is that the candidate is required to carry out a research and submit a thesis in the final year.

My area of interest is on the challenges faced by Sign Language Interpreters working with children with hearing impairment in an inclusive secondary high school setting. I intend to stay in the school observing and interacting with the sign language interpreters and the teaching and non-teaching staff. I will basically interview and observe interpreters about their indoor and outdoor work with the deaf children. This will last at least for a period of two – three months.

The purpose of this letter is therefore to request your office to permit me carry out the research in your School. I will Endeavour to keep all the information obtained in the school confidential.

Thank you,

Yours faithfully,

Omugur Julius Patrick

Mobile Phone: +256-774-047067

Appendix VI: Letter of informed Consent to Conduct Interviews

19th July 2006

C/o Kyambogo University,

P.O box 1 Kyambogo,

Kampala.

Mr. / Mrs. / Ms

.....,

.....,

Dear Sir/ Madam,

Subject: Request for an Interview

I have been working in the above mentioned institution. However, I am currently on study leave to pursue a course for a master of Philosophy degree in Special Needs Education in Oslo University, Norway. One of the requirements for this course is that candidates have to carry out a research and submit a thesis as partial fulfilment for the award of the degree in the final year.

My area of research is on the *Challenges Faced by Sign Language Interpreters working with Children with Hearing Impairment in an Inclusive post-primary School setting*, thus the reason for selecting this school. Having trained with additional skills before and now working as a sign language interpreter in this school for a long time, I feel you may have some vital information for the above subject. I am therefore requesting you to participate in this study by way of providing some information about the topic in form of an interview. If you agree to this request, please do suggest dates, time and the venue which is convenient for us to meet. Please also feel free to contact me on my cell phone number below. All the information obtained is basically meant for my academic study and will be kept confidential.

I look forward to hearing from you.

Thank you,

Julius Patrick Omugur

Mobile Phone: +256-774-047067

Appendix VII: Letter of Appreciation to School B

10th December 2006

C/O UNIVERSITY OF OSLO, NORWAY

Department of Special Needs Education, Blindern Campus, Oslo.



Dear Sir,

With your assistance, I have just finished collecting research data for my final year of study for a Master degree of Philosophy in Special Needs Education from Oslo University, Norway. I realized that this research coincided when the students in your school were busy doing Ordinary level mid-term and Advanced level end of year examinations. Considering all this commitments you had in the school, I am very grateful that your school accepted to enrol Deaf children to benefit in such an inclusive setting! The fact that Sign Language Interpreters play an important role in facilitating Education of these Children left me very impressed, I wish to thank you and the School management for all the support you accorded to me during the research that I hope will benefit me and your school. I will probably have more time to share my views with you about the study findings when I return from Norway. I also wish you and all the staff the best of luck during the coming New Year, 2007.

Yours sincerely,

Omugur Julius Patrick

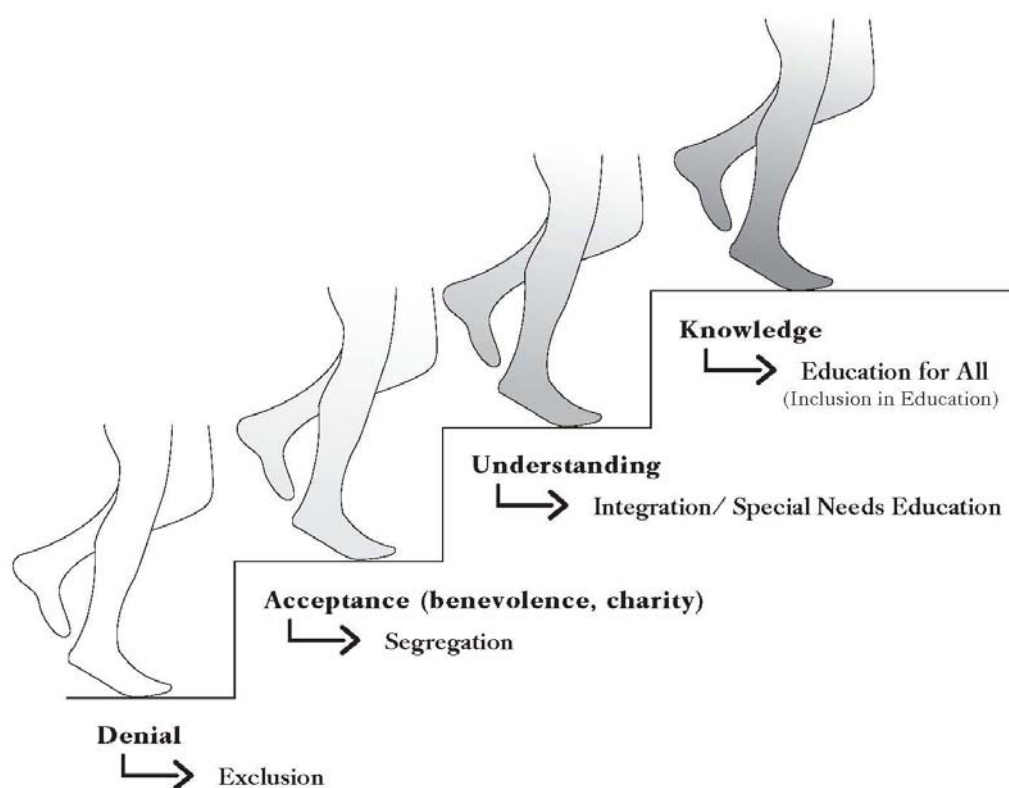
(Candidate, MPhil. SNE, Oslo): Mobile Phone: +256-77-4047067

CC. The District Education Officer in-charge EARS Programme

Appendix VIII: Understanding the Process of Inclusion

Understanding the Process of Inclusion

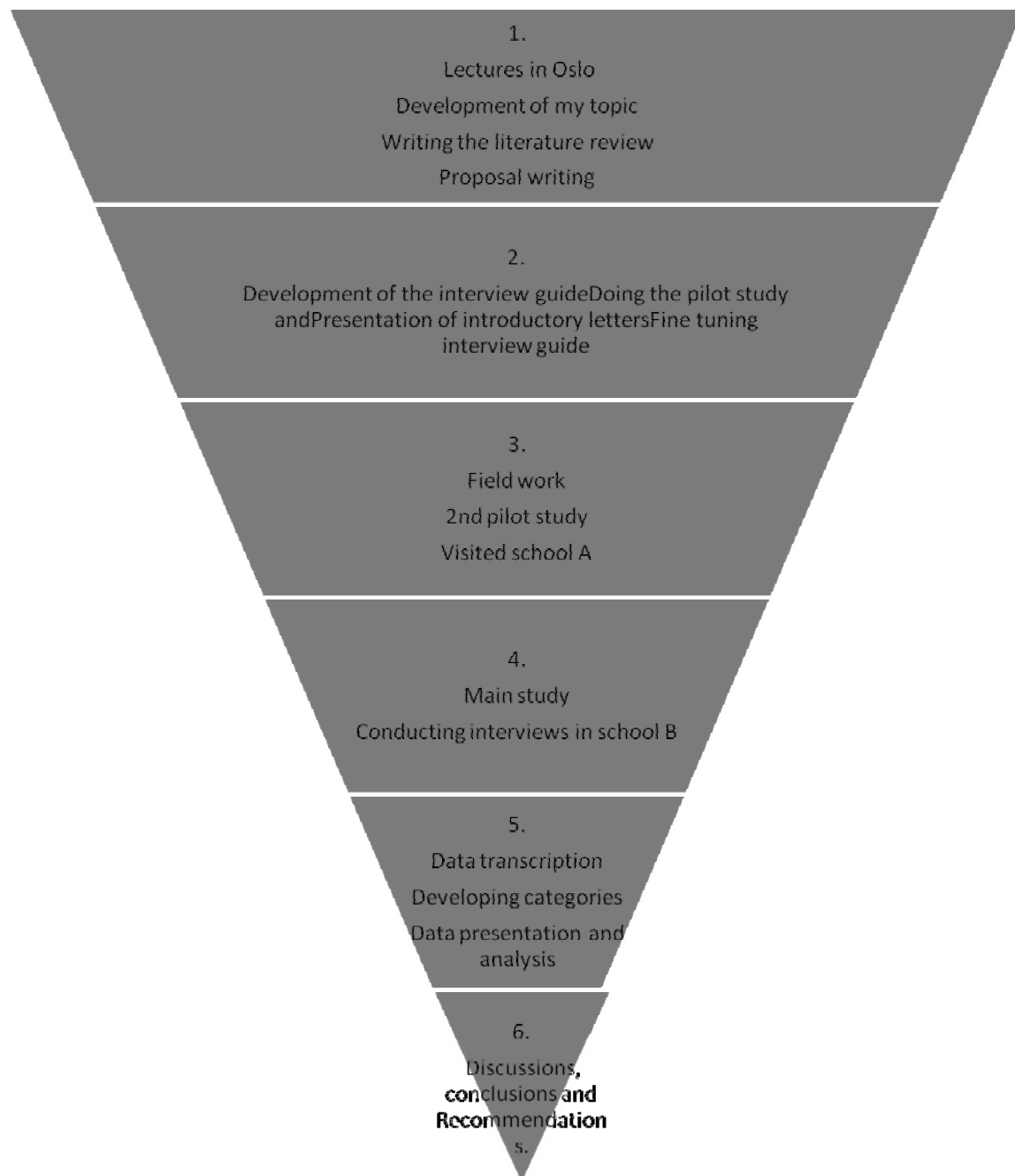
Ensuring the Right to Education for ALL



Steps from Exclusion to Inclusion

Source: Johnsen, B. (2006): *“When All Means All”* Experiences in Three African Countries with EFA and Children with Disabilities

Appendix IX: Thesis/Study Plan 2005 - 2007



Appendix X: The Study Process

This study has been carried out through the theoretical and empirical phases in close collaboration with the advisor at Oslo. Below are fundamental areas that were followed to produce the research report;

Theoretical Development and group Cohesion:

- Development of the Research Topic
- Information from lecturers, group discussions, library documents on research consultation, and access to credible journal articles from Eric and BIBSY data bases.
- Preparation and development of the research instruments
- Theoretical foundation of the research basis
- Methodology development
- Overall research frame work

Empirical Foundation/Discussions with Research Advisors in Uganda & Oslo

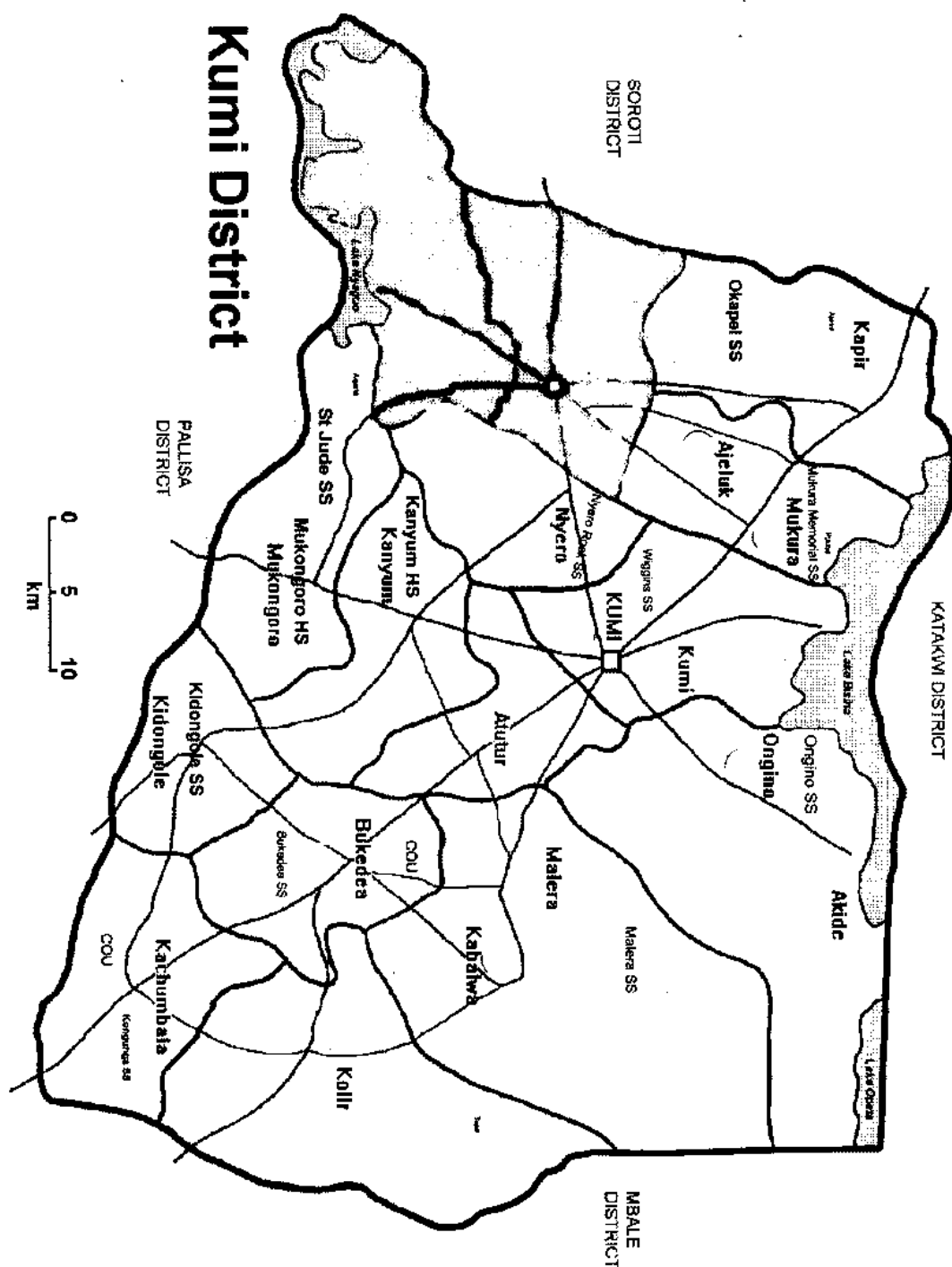
- Pilot study
- Adjustment of the study instruments
- Doing the Main study
- Data collection
- Data treatment

Theoretical Development/Discussions with the Research Advisor in Oslo

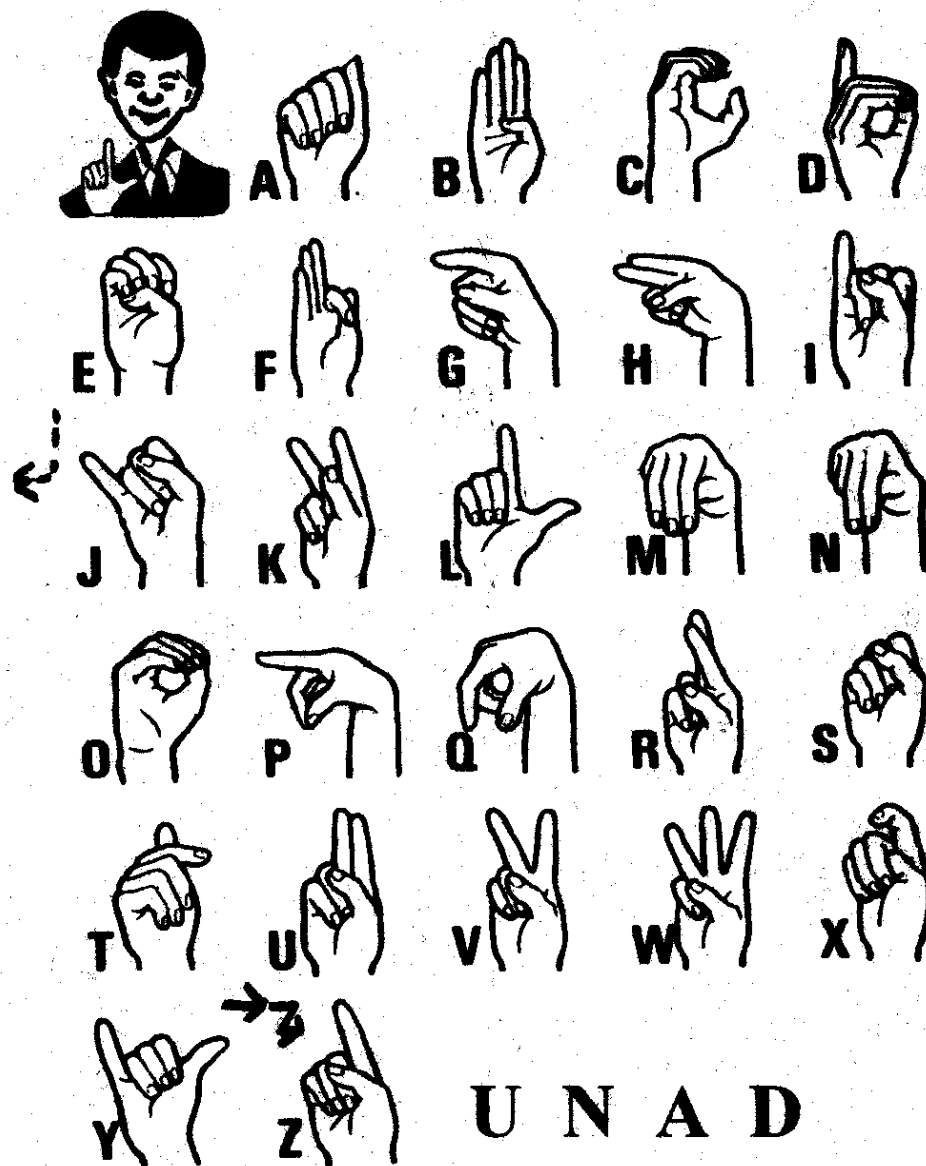
- Data analyses
- Reflection on all the theoretical parts of the thesis
- Final development of the body of the research thesis

This processes helped to check validity and reliability concerns through out the whole research with the guidance of the local and main thesis advisors in Uganda and Oslo.

Appendix XII: Map of the Study Area – Eastern Uganda

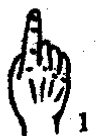



















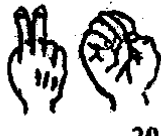
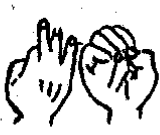


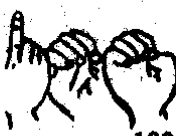












Appendix XIII: International One Hand Sign Language Alphabet for the Deaf



U N A D
INTERNATIONAL ONE HAND
ALPHABET FOR THE DEAF

Appendix XIV: Numbering in Sign Language

NUMBERS IN SIGNS				
				
				
				
				
				
				
				
SUBTRACTION	PERCENTAGE	SQAURE	TRIANGLE	CIRCLE
THIS EDUCATION CHART IS PUBLISHED BY: UGANDA NATIONAL ASSOCIATION OF THE DEAF (UNAD) P.O. BOX 7339, KAMPALA TEL: 041-532875 / 532902 PLOT 118 KAMWOKYA - BUKOTO STREET				

